

(Abstract)

M. A. Economics Programme in the Department of Economics, Dr. Janaki Ammal Campus, Palayad
- Revised Scheme and Syllabus - Approved- Implemented w.e.f. 2023 admission--Orders issued

ACADEMIC C SECTION

ACAD C/ACAD C1/108/2024

Dated: 24.01.2024

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- Read:-1. U. O. No. ACAD C/ACAD C3/22373/2019 dtd.12.09.2023
2. Circular No. dated ACAD C/ACAD C3/22373/2019 dated 12/09/2023
3. Email dated 04.01.2024 from the Head, Department of Economics, Dr. Janaki Ammal Campus.
4. Minutes of the meeting of the Department Council held on 17.11.2023
5. Orders of Vice Chancellor in file of even No dated 10.01.2024
6. U O No. ACAD C/ACAD C1/108/2024 dated 11.01.2024
7. Minutes of the syllabus review committee meeting held on 14.01.2024

ORDER

1. The revised Regulations for Post Graduate Programmes under Choice Based Credit and Semester System in the University Teaching Departments/Schools were implemented w.e.f. 2023 admissions vide paper read(1) above.
2. As per paper read (2) above, Heads of all Teaching Departments were requested to submit the revised Syllabus in accordance with the approved Regulations along with a copy of the Department Council Minutes
3. As per paper read (3) above, the Head, Department of Economics, Dr. Janaki Ammal Campus submitted the Scheme & Syllabus of M.A. Economics Programme to be implemented in the University Teaching Department w. e. f. 2023 admissions.
4. Department Council vide the paper read (4) above approved the aforementioned Scheme & Syllabus of M. A. Economics Programme to be implemented in the Dept. of Economics of the University w. e. f. 2023 admission.
5. While submitted the syllabus for approval, the Vice Chancellor has nominated 3 member committee (paper read 5) comprising Dean, Faculty of Humanities, and Prof. P Arunachalam, Dept of Applied Economics, CUSAT (External expert) and Dr.V.Shaharbhhan, Head, Dept of economics (Convener) to review the scheme & syllabus of M.A. Economics Programme.
6. Accordingly, the committee convened an online meeting on 14.01.2024 and reviewed the syllabus of M.A Economics programme and recommended it for approval w.e.f.2023 admission.(Paper read 7)
7. The Vice Chancellor after considering the matter in detail, and in exercise of the powers of the Academic Council conferred under section 11(1), Chapter III of Kannur University Act 1996, approved the **Scheme & Syllabus of M. A. Economics Programme and accorded sanction to implement the same in the Department of Economics, Dr. Janaki Ammal Campus of the University w.e.f. 2023 admissions, subject to report to the Academic Council.**
8. The Scheme & Syllabus of M. A. Economics Programme, under Choice Based Credit Semester System implemented in the Department of Economics, Dr. Janaki Ammal Campus w. e. f. 2023 admission, is appended and uploaded in the University Web Site.(www.kannuruniversity.ac.in)
9. Orders are issued accordingly.

Sd/-

Narayanadas K
DEPUTY REGISTRAR (ACAD)
For REGISTRAR

To: 1.The Head, Department of Economics, Dr. Janaki Ammal Campus, Palayad
2. Convener, Curriculum Committee.

Copy To: 1. The Examination branch (through PA to CE)
2. PS to VC/ PA to PVC/PA to R
3. DR/AR1/AR II (Acad), EXCI, EP IV
4. Web Manager (for uploading in the website)
5. Computer Programmer
6.SF/DF/FC

Forwarded /By Order


SECTION OFFICER



Outcome Based Education (OBE) Curriculum for Post-graduate Programme



KANNUR UNIVERSITY
DEPARTMENT OF ECONOMICS
Choice Based Credit Semester System (CBCSS)

Name of the Programme:

M.A. ECONOMICS

(Syllabus effective from 2023 Admission)



KANNUR UNIVERSITY
Syllabus for MA Economics

SL. NO	CONTENTS	PAGE NO.
I	About the Department	3
II	Scope	3
III	Definitions	4
IV	Graduate Attributes	5
V	Programme Objectives (POs)	8
VI	Programme Outcomes (POs)	9
VII	Programme Specific Outcomes (PSOs)	9
VIII	M.A. Economics Programme Details	10
IX	Programme Structure	11
X	Eligibility for Admissions	16
XI	Scheme of Evaluation	16
XII	Span Period	18
XIII	Conversion of Marks into Grades Points	19
XIV	Attendance Requirement	19
XV	Syllabus	22-173

I ABOUT THE DEPARTMENT

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

1. M.A in Economics

2. Ph. D in Economics

The department has released 17 batches of M.A Applied Economics students, 2 batches of M.A Economics students and few Ph. D degree holders and most of them have secured good and covetable placement in public and private sector establishments. The Department of Economics is proactively engaging multiple and multi-dimensional research projects that cover social and village welfare, health care, education, water and energy management, and conservation, among others. The Department of Economics, since its inception has been organizing national seminars annually and also conducts workshops, discussions, and symposiums with the active participation of faculty and students involving academicians and experts in the concerned areas. Theses academic discussions and discourses will enable the department to nurture and emerge as the most reputed post graduate study and research centre in India.

II SCOPE

The Department of Economics has introduced Choice Based Credit and Semester System (CBCSS) from 2010 onwards offering two years four semesters programme. Choice Based Credit Semester System presupposes academic autonomy, criteria approach in academic environment. Semester system course credits alphabetical grading and interdepartmental academic collaboration. There shall be a Department Council consisting of all regular teachers in

the department. The Head of Department shall be responsible for admission to all the programmes offered by the department including verification of records, admission and evaluation. The entrance test will be conducted by the University. Heads of the Department will constitute a departmental admission committee to assist him/her in the admission process. The Department Council will deliberate on courses and specify the distribution of credits semester wise and course wise. For each course the number of credits for lectures, tutorials/practical. etc. will be specified.

III DEFINITIONS

(i) ‘Academic Programme’ means an entire course of study comprising its programme structure, course details, evaluation schemes etc. designed to be taught and evaluated in a teaching Department/Centre or jointly under more than one such Department/ Centre.

(ii) ‘Course’ means a segment of a Programme limited to one semester in a subject.

(iii) ‘Programme Structure’ means a list of courses (Core course, Elective course, Ability Enhancement Course, Value added Course, Skill Enhancement Course etc) that makes up an Academic Programme, specifying the syllabus, Credits, hours of teaching, evaluation and examination schemes, minimum number of credits required for successful completion of the programme etc. prepared in conformity to University Rules.

(iv) ‘Core Course’ means a course that a student admitted to a particular programme must successfully complete to receive the degree and which cannot be substituted by any other course.

(v) ‘Elective Course’ means an optional course to be selected by a student out of such courses offered in the same or other Departments. Elective Courses may include Discipline Specific Elective (DSE), Interdisciplinary Elective (IDC) Multidisciplinary Elective (MDC) and MOOC Courses.

(vi) Ability Enhancement Course (AEC) may be of two kinds.: Ability Enhancement Compulsory Course (AECC) and Skill Enhancement Course (SEC) AEC are the courses based upon the content that leads to Knowledge enhancement. SEC are value-based and/or skill-based and are aimed at providing hands-on-training, competencies, skills, etc

(vii) ‘Credit’ - Academic credit is defined both in terms of student efforts and teacher's efforts. A course which includes one hour of lecture or tutorial or minimum 2 hrs of lab work/ practical work/field work per week is given one credit hour. Accordingly, a one credit course in a

semester should be designed for 15 hrs. Lecture/'tutorials +30 hrs. of leaner engagement in terms course related activities such as seminars preparation. submitting assignments etc.

(viii) 'SGPA' means Semester Grade Point Average calculated for individual semester.

(ix) 'CGPA' is Cumulative Grade Points Average calculated for all courses completed by the students at the end of the programme by clubbing together SGPA of all semesters

IV.GRADUATE ATTRIBUTES

Kannur University has identified graduate attributes as part of the commitment towards supporting student development. Graduate attributes are central to design, delivery and assessment of student learning. The Graduate Attributes of Kannur University will seek to be actualized in terms of the framing of course curricula, learning outcomes, admission criteria and other related administrative regulations of the University. Generic learning outcome of the course is

Complex problem-solving: The graduates should be able to demonstrate the capability to: • solve different kinds of problems in familiar and non-familiar contexts and apply the learning to real-life situations.

Critical thinking: The graduates should be able to demonstrate the capability to: • apply analytic thought to a body of knowledge, including the analysis and evaluation of policies, and practices, as well as evidence, arguments, claims, beliefs, and the reliability and relevance of evidence, • identify relevant assumptions or implications; and formulate coherent arguments, • identify logical flaws and holes in the arguments of others, • analyze and synthesize data from a variety of sources and draw valid conclusions and support them with evidence and examples.

Creativity: The graduates should be able to demonstrate the ability to: • create, perform, or think in different and diverse ways about the same objects or scenarios, • deal with problems and situations that do not have simple solutions, • innovate and perform tasks in a better manner, • view a problem or a situation from multiple perspectives, • think 'out of the box' and generate solutions to complex problems in unfamiliar contexts, • adopt innovative, imaginative, lateral thinking, interpersonal skills and emotional intelligence

Communication Skills: The graduates should be able to demonstrate the skills that enable them to: • listen carefully, read texts and research papers analytically and present complex information in a clear and concise manner to different groups/audiences, • express thoughts and ideas

effectively in writing and orally and communicate with others using appropriate media, • confidently share views and express herself/himself, • construct logical arguments using correct technical language related to a field of learning, work/vocation, or an area of professional practice, and convey ideas, thoughts, and arguments using language that is respectful and sensitive to gender and other minority groups.

Analytical reasoning/thinking: The graduates should be able to demonstrate the capability to: • evaluate the reliability and relevance of evidence; • identify logical flaws in the arguments of others; • analyze and synthesize data from a variety of sources; draw valid conclusions and support them with evidence and examples, and address opposing viewpoints.

Research-related skills: The graduates should be able to demonstrate: • a keen sense of observation, inquiry, and capability for asking relevant/ appropriate questions, • the ability to problematize, synthesize, and articulate issues and design research proposals, • the ability to define problems, formulate appropriate and relevant research questions, formulate hypotheses, test hypotheses using quantitative and qualitative data, establish hypotheses, make inferences based on the analysis and interpretation of data, and predict cause-and-effect relationships, • the capacity to develop appropriate methodology and tools for data collection, • the appropriate use of statistical and other analytical tools and techniques, • the ability to plan, execute and report the results of an experiment or investigation, the ability to acquire the understanding of basic research ethics and skills in practicing/doing ethics in the field/ in personal research work, regardless of the funding authority or field of study.

Coordinating/collaborating with others: The graduates should be able to demonstrate the ability to: • work effectively and respectfully with diverse teams, • facilitate cooperative or coordinated effort on the part of a group, • act together as a group or a team in the interests of a common cause and work efficiently as a member of a team.

Leadership readiness/qualities: The graduates should be able to demonstrate the capability for: • mapping out the tasks of a team or an organization and setting direction. • formulating an inspiring vision and building a team that can help achieve the vision, motivating and inspiring team members to engage with that vision. • using management skills to guide people to the right destination

Learning how to learn skills: The graduates should be able to demonstrate the ability to: • acquire new knowledge and skills, including ‘learning how to learn skills, that are necessary for

pursuing learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social, and cultural objectives, and adapting to changing trades and demands of the workplace, including adapting to the changes in work processes in the context of the fourth industrial revolution, through knowledge/ skill development/re skilling, • work independently, identify appropriate resources required for further learning, • acquire organisational skills and time management to set self-defined goals and targets with timelines. • inculcate a healthy attitude to be a lifelong learner,

Digital and technological skills: The graduates should be able to demonstrate the capability to: • use ICT in a variety of learning and work situations, • access, evaluate, and use a variety of relevant information sources, and use appropriate software for analysis of data.

Multicultural competence and inclusive spirit: The graduates should be able to demonstrate: • the acquisition of knowledge of the values and beliefs of multiple cultures and a global perspective to honour diversity, • capability to effectively engage in a multicultural group/society and interact respectfully with diverse groups, • capability to lead a diverse team to accomplish common group tasks and goals. • gender sensitivity and adopting a gender-neutral approach, as also empathy for the less advantaged and the differently-abled including those with learning disabilities

Value inculcation: The graduates should be able to demonstrate the acquisition of knowledge and attitude that are required to: • embrace and practice constitutional, humanistic, ethical, and moral values in life, including universal human values of truth, righteous conduct, peace, love, nonviolence, scientific temper, citizenship values, • practice responsible global citizenship required for responding to contemporary global challenges, enabling learners to become aware of and understand global issues and to become active promoters of more peaceful, tolerant, inclusive, secure, and sustainable societies, • formulate a position/argument about an ethical issue from multiple perspectives • identify ethical issues related to work, and follow ethical practices, including avoiding unethical behaviour such as fabrication, falsification or misrepresentation of data, or committing plagiarism, and adhering to intellectual property rights, • recognize environmental and sustainability issues, and participate in actions to promote sustainable development. • adopt an objective, unbiased, and truthful actions in all aspects of work, • instill integrity and identify ethical issues related to work, and follow ethical practices.

Autonomy, responsibility, and accountability: The graduates should be able to demonstrate the ability to: • apply knowledge, understanding, and/or skills with an appropriate degree of independence relevant to the level of the qualification, • work independently, identify appropriate resources required for a project, and manage a project through to completion, • exercise responsibility and demonstrate accountability in applying knowledge and/or skills in work and/or learning contexts appropriate for the level of the qualification, including ensuring safety and security at workplaces.

Environmental awareness and action: The graduates should be able to demonstrate the acquisition of and ability to apply the knowledge, skills, attitudes, and values required to take appropriate actions for: • mitigating the effects of environmental degradation, climate change, and pollution, • effective waste management, conservation of biological diversity, management of biological resources and biodiversity, forest and wildlife conservation, and sustainable development and living.

Community engagement and service: The graduates should be able to demonstrate the capability to participate in community-engaged services/ activities for promoting the wellbeing of society.

Empathy: The graduates should be able to demonstrate the ability to identify with or understand the perspective, experiences, or points of view of another individual or group, and to identify and understand other people's emotions

V. PROGRAMME OBJECTIVES (POs)

1. To inculcate and develop aptitude to integrate economic theory and practices of broad development aspects of international and national economic policies and analysis of different sectors.
2. To train students to gain knowledge in quantitative and econometric tools to handle large economic data and carry out data analysis of real-life economic issues.
3. To teach a wide range of knowledge in current economic issues and gaining analytical skills, including problem-solving, project work and presentation so as enable students to take prominent roles in a wide spectrum of employment and research.

VI. PROGRAMME OUTCOMES (PO)

PO1	Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.
PO2	Problem Solving: Identify, formulate, conduct investigations, and find solutions to problems based on in-depth knowledge of relevant domains.
PO3	Communication: Speak, read, write and listen clearly in person and through electronic media in English/language of the discipline, and make meaning of the world by connecting people, ideas, books, media and technology.
PO4	Responsible Citizenship: Demonstrate empathetic social concern, and the ability to act with an informed awareness of issues.
PO5	Ethics: Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.
PO6	Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context socio- technological changes.
PO7	Environmental Sustainability and Global Perspective - Develop an understanding of global standards to foster legal environment. Learn and practice to critically analyze the legal issues from local, national and international concerns.

VII. PROGRAMME SEPCIFIC OUTCOMES (PSO)

PSO1	A sound knowledge in the advanced economic theory and its application.
PSO2	An in-depth knowledge in the fields like agricultural Economics, financial market, environmental and natural resource management, development economics, international trade, econometrics, mathematical economics etc. and grab research openings in govt. funded national and international research institutions.
PSO3	Demonstrate a sound potential and ambience for a variety of challenging careers through Innovation in teaching and research.
PSO4	Mastery over mathematical and quantitative techniques commonly used in economics research and also in the field of corporate business and policy applications
PSO5	Attain a competitive edge in the State and Central Service examinations where the subject content of economics dominates in the selection process. Mastery in social skills and leadership qualities.

VIII. M.A. ECONOMICS PROGRAMME DETAILS

M.A Economics programme is a two-year course divided into four-semester. A student is required to complete 82 credits for the completion of course and the award of degree.

CREDIT PATTERN OF M A ECONOMICS

Semester	1	2	3	4	5	6	7	8	Total Credits
	No. of Core Courses (Discipline Specific) 4 Credits Project -6 credit	No of Elective Courses DSE 3 Credits	Interdisciplinary Elective 4/3/2 Credits	Multidisciplinary Elective Courses 4 Credits	Ability Enhancement (AEC) 2 Credits	Skill Enhancement Course (SEC) 2 Credits	Value Addition Course/ MOOC Courses (VAC) 2 Credits	Internship/ Field Visit/Minor Project/Institutional- Industrial Visit 2 Credits	
1	4	1							19
2	3	2			1	1			22
3	3	1		1			1	1	21
4	3	2							20
credit	54	18		4	2	2		2	82

- Core Courses can be Lecture Course (LC), Practicum Course / Lab Work (PC) or Project/Dissertation/Internship (P/I)
- Core Course/DSE and Project/Internship constitutes Major Component. (Column 1 + Column 2)
- DSE, Interdisciplinary Elective / Internship /Field Work/Minor Project / Institutional – Industrial visit constitutes Minor Component (Column 2 + Column 3 + Column 8)
- Major and Minor Components - Core (DSC), Elective (DSE), Interdisciplinary Elective, Internship/Field Visit/Minor Project/Institutional – Industrial Visit(Column 1 + Column 2 + Column 3 + Column 8) should be minimum = 70% Credits. i.e. for 80 Credit Programme it should be 56 Credits.
- Minimum 10% credits shall be from courses offered from other departments (Col 4 + Col 5 + Col 6 + Col 7) = 8 credits
- All programmes to have at least one 2 Credit course as Internship / Field Visit/Minor Project/ Institutional- Industrial visit outside the university.
- All students should complete a Value Addition Course / MOOC course of at least 2 Credits to complete the requirements of the Master’s Programme. These shall be considered as additional credits and shall not be considered for computation of CGPA.

IX PROGRAMME STRUCTURE

The distribution of the courses over the four semesters of the PG program can be,

Semester I

Course Code	Course Title	Core/ Elective	Credit	Instructional hours /week	Internal Marks	End Sem. Marks	Total
MAECO01DSC01	Microeconomic Theory	DSC	4	4	40	60	100
MAECO01DSC02	Macroeconomic Theory	DSC	4	4	40	60	100
MAECO01DSC03	Development Issues of Indian Economy with special reference to Kerala	DSC	4	4	40	60	100
MAECO01DSC04	Quantitative Techniques for Economic Analysis	DSC	4	4	40	60	100
	Elective	DSE	3	3	40	60	100
		Total	19	19	200	300	500

Semester II

Course Code	Course Title	Core/ Elective	Credit	Instructional hours /week	Internal Marks	End Sem. Marks	Total
MAECO02DSC05	Research Methodology	DSC	4	4	40	60	100
MAECO02DSC06	Mathematical Economics	DSC	4	4	40	60	100
MAECO02DSC07	International Economics	DSC	4	4	40	60	100
	Elective	DSE	3	3	40	60	100
	Elective	DSE	3	3	40	60	100
	SEC / AEC (to be obtained from other dept.)	-	2	2	40	60	100
	SEC / AEC (to be obtained from other dept.)	-	2	2	40	60	100
		Total	22	22	280	420	700

Semester III

Course Code	Course Title	Core/ Elective	Credit	Instructional hours /week	Internal Marks	End Sem. Marks	Total
MAECO03DSC08	Environmental Economics	DSC	4	4	40	60	100
MAECO03DSC09	Political Economy	DSC	4	4	40	60	100
MAECO03DSC10	Econometrics	DSC	4	4	40	60	100
	Elective	DSE	3	3	40	60	100
	Multidisciplinary/Interdisciplinary (to be obtained from other dept.)	-	4	4	40	60	100
MAECO03DSC11	Internship at Research Institutions/Industry Field Visit/Minor Projects outside the university	DSC	2				100
		Total	21	19	200	300	600
	Value Added Courses/Mooc Course		2	Credits earned from Value Added Course/ MOOC course will be over and above the minimum credits required for the completion of the programme			

Semester IV

Course Code	Course Title	Core/Elective	Credit	Instructional hours /week	Internal Marks	End Sem. Marks	Total
MAECO04DSC12	Financial Institutions and Markets	DSC	4	4	40	60	100
MAECO04DSC13	Economics of growth and development	DSC	4	4	40	60	100
	Elective	DSE	3	3	40	60	100
	Elective	DSE	3	3	40	60	100
MAECO04DSC14	Project	DSC	6	6	40	60	100
		Total	20	20	200	300	500

Total credits of four semesters = 82

Total Marks = 2300

DISCIPLINE SPECIFIC CORE COURSES

Sl. No	Course Code	Course Title	Credit	Semester
1	MAECO01DSC01	Microeconomic Theory	4	1
2	MAECO01DSC02	Macroeconomic Theory	4	1
3	MAECO01DSC03	Development Issues of Indian Economy- With special reference to Kerala	4	1
4	MAECO01DSC04	Quantitative Techniques for Economic Analysis	4	1

5	MAECO02DSC05	Research Methodology	4	2
6	MAECO02DSC06	Mathematical Economics	4	2
7	MAECO02DSC07	International Economics	4	2
8	MAECO03DSC08	Environmental Economics	4	3
9	MAECO03DSC09	Political Economy	4	3
10	MAECO03DSC10	Econometrics	4	3
11	MAECO03DSC11	Internship	2	3
12	MAECO04DSC12	Financial Institutions and Markets	4	4
13	MAECO04DSC13	Economics of growth and development	4	4
14	MAECO04DSC14	Project	6	4
Total Credit			56	

Selection of Elective Courses: 6 elective courses (18 credits) are compulsory to complete this programme; a student may choose electives in all semester from the lists of options being offered by the Department.

DISCIPLINE SPECIFIC ELECTIVE COURSES

Sl.No	Course Code	Course Title	Credit	Semester
1	MAECO01DSE01	Databases on the Indian Economy	3	1
2	MAECO01DSE02	Corporate Social Responsibility and Development	3	1
3	MAECO01DSE03	Economics of Health	3	1
4	MAECO02DSE04	Population Studies	3	2
5	MAECO02DSE05	Public Economics	3	2
6	MAECO02DSE06	Economics of Education	3	2
7	MAECO02DSE07	Managerial Economics	3	2
8	MAECO02DSE08	Agricultural Economics	3	2
9	MAECO03DSE09	Economics of Tourism	3	3
10	MAECO03DSE10	Gender Economics	3	3
11	MAECO03DSE11	Institutional Economics	3	3

12	MAECO04DSE12	Operations Research for Economic Analysis	3	4
13	MAECO04DSE13	Urban and Regional Economics	3	4
14	MAECO04DSE14	Entrepreneurial Economics	3	4
15	MAECO04DSE15	Labour Economics	3	4

AEC/ SEC/MDC COURSES OFFERED FOR OTHER DEPARTMENT STUDENTS- II SEMESTER

Sl.No	Course Code	Course Title	Credit	Semester
1	MAECO02MDC01	Economics of Natural Resources	2	2
2	MAECO02MDC02	Kerala Economy	2	2
3	MAECO02MDC03	Multidisciplinary foundations of Economics	2	2
4	MAECO02SEC01	Money, Banking and Fintech	2	2
5	MAECO02SEC02	Data for Social Sciences	2	2
6	MAECO02SEC03	Optimization Techniques in Economics	2	2
7	MAECO02AEC01	Organisational Psychology and Consumer Behaviour	2	2

MDC COURSES OFFERED FOR OTHER DEPARTMENT STUDENTS- III SEMESTER

Sl.No	Course Code	Course Title	Credit	Semester
1	MAECO03MDC04	Health Economics	4	3
2	MAECO03MDC05	Introduction to Gender Economics	4	3
3	MAECO03MDC06	Econometrics for Social Science	4	3
4	MAECO03MDC07	Introduction to Behavioural Economics	4	3

Teaching: The faculty of the Department is primarily responsible for organizing lecture/Practical/Tutorial work. The instructions related to tutorials are provided by the respective registering units under the overall guidance of the Department. Faculty from some other Departments and constituent colleges are also associated with lecture and tutorial work in the Department. There shall be 90 instructional days excluding examination in a semester.

VALUE ADDED COURSE/ MOOC /ONLINE COURSE OFFERED IN SWAYAM

- In addition to the courses specified as part of the programme, all students should complete a Value-Added Course or MOOC course of at least 2 credits to complete the requirements of getting the degree.
- Credits earned from Value Added Course/MOOC course will be over and above the minimum credits required for the completion of the programme.
- Value Added Courses will be offered by the departments and the students can opt for it. The MOOC courses selected by the students should be relevant to the discipline and approved by the Department in which the student is enrolled.
- The students should submit the pass certificate of the Values Added Course, MOOC course before completing the fourth semester examination to the Controller of Examination through the Head of the Department.
- The marks/grades secured for Value Added Courses/MOOC' course will not be considered for the computation of CGPA. However the name of such courses, the credits earned, and the marks. /Grades secured will be shown in the consolidated grade card

DISSERTATION/ PROJECT WORK

- All the students are required to carry out a research project in the fourth semester. For this the students are encouraged to go to National Research institutes, to acquire hands-on training and exposure to a research culture. The department/University may establish close link with such institutions for the purpose by way of executing appropriate MoU's, If required.
- Every candidate has to submit a copy of the Project Report approved by the project supervisor before the last date fixed by the Department.
- Continuous evaluation of the project work shall be done by the project supervisor.
- The End Semester examination of the Project work shall be done by a board of at least two examiners, in which one should be an external expert. For the evaluation of the project work the candidate must present the work before the board of examiners which will be followed by a Viva-Voce. The End Semester Evaluation of the project will be based on the project report, its presentation and Viva-Voce
- The weightage for Continuous Evaluation and End Semester Evaluation of the project/dissertation shall be in the ratio 40:60.

X. ELIGIBILITY FOR ADMISSIONS

1. As per the Regulations prescribed by the University for each programme from time to time.
2. Candidates who have passed their qualifying examination from Universities outside Kerala and candidates who have passed their degrees with different nomenclature from the Universities within Kerala, should submit Recognition/Equivalency Certificate while seeking admission.
3. Admission to the PG programmes of the University Departments shall be made purely based on Entrance Examination. Notification in this regard shall be made well in advance. The Entrance Examination conducted by the University is mandatory for all the programmes. Departments may conduct practical/proficiency test in addition to entrance examination if required. In such cases the admission rank list will be prepared based on 50% for entrance examination and 50% for practical/proficiency test. If the number of candidates admitted based on the Entrance Exam is less than the sanctioned strength, the concerned department can fill the vacancy by making necessary press release by fulfilling the reservation norms based on the marks obtained in the qualifying examination.
4. There should be uniformity in the date of starting the programmes and conducting the End Semester Examination of different PG Programmes of the University.

RESERVATION

As per government/university rules.

Admission to M. A Economics is purely on the basis of Entrance Examination. The questions for Entrance Examination are of objective multiple-choice type. The syllabus of the Entrance Examination will be provided along with admission prospectus.

XI. SCHEME OF EVALUATION

- English shall be the medium of instruction and examination.
- Examinations shall be conducted at the end of each Semester as per the Academic Calendar notified by the Kannur University.
- Examination/Evaluation: A student will be evaluated out of 100 marks during the course.
- The programme will include Discipline Specific Core courses (DS(I). Discipline Specific Elective courses (DSE). Interdisciplinary Electives courses (IDC). Multidisciplinary Elective courses (MDC) Ability Enhancement Course; (.A.EC). Skill Enhancement

courses (SEC) and Value-Added Courses (VAC). In Discipline specific courses (DSC and DSE) offered by a department will be taken by the students of the respective departments. Other courses offered by a department can be taken by students of any department.

- Elective Courses offered from other departments can be opted for any of the semesters during the entire Programme other than first semester. Overall, a student should earn minimum 8 credits from the courses offered by other department.
- In the third semester all students should compulsorily register for an IDC / MDC offered by other Departments. They can make-up the remaining credits by opting IDC/ MDC/AEC/ SEC from other department in second- third or fourth semester.
- Evaluation of the students shall be done by the faculty member who teaches the course on the basis of Continuous Assessment and End Semester Examination. There shall be double valuation system of answer books. The average of two valuations shall be taken into account. If there is a variation of more than 10% of the maximum marks, the answer books shall be valued by a third Examiner. The final marks to be awarded shall be average of the nearest two out of three awarded by the examiners, after that, there shall be no provision for revaluation. The proportion of the distribution of marks among End Semester and Continuous Assessment shall be 60-40.
- Continuous Evaluation includes assignments, seminars, periodic written examinations or other measures as proposed in the syllabus and approved by the university.
- The weightage of each component under (continuous Evaluation shall be usually in the following proportions:

Split up of Marks under Choice Based Credit Semester System	
Internal Marks	
1	Mid Semester Exam (16 Marks)
2	Seminar Presentation (16 Marks)
3	Assignment (8 Marks)
Total	40
End Semester External Marks	
	60
Total	100

- The End Semester Examinations of each semester will be conducted by the Controller of Examinations. It will be the responsibility of the Department to maintain a sufficient balance of different levels of questions in the Question Bank. The tabulation registers for each semester shall be prepared and mainlined by the examination Branch of Kannur University
- Examinations for the courses in the category of AEC. IDC, MDC. SEC, VAC. Field Visit Minor Project Institutional- industrial Visit shall be done by the departmental. However, the mode and rubrics of evaluation in such courses shall be mentioned in the syllabus and approval sought from the university'.
- The Board of Examiners will function as the Pass Board with the Head of the Department or a nominee of the Vice Chancellor as its Chair.
- The grades finalized by the pass board will be forwarded to the Controller of Examinations by the Head of the Department/Chairman of the Board of examiners.
- The minimum weighted grade point average needed for a pass in a course is 4 (Grade D) while a minimum weighted grade point: average 1.8 out of 6 is needed in ESE alone (ie, 30% of the ESE).

7 Point Direct Grading System is used for the evaluation of the performance of each answer in an examination. Grade Points corresponding to each grade is given below.

Letter grade	Grade Points
O	6
A+	5
A	4
B+	3
B	2
C	1
F	0

XII. SPAN PERIOD

The minimum duration the completion of any 2-year programme is 4 semesters and the maximum period for completion is eight (8) Semesters from the date of registration

No students shall be admitted as a candidate for the examination for any of the Years/Semesters after the lapse of 4 years from the date of admission to the first year of the M.A. Programme.

XIII. CONVERSION OF MARKS INTO GRADE POINTS

An alphabetical Grading System shall be adopted for the assessment of a student's performance in a course as mandated by the UGC. The following table gives the WGPA and corresponding letter grade in a course.

WGPA	Letter grade
9.5 and above	O
8.5 and above and less than 9.5	A+
7.5 and above and less than 8.5	A
6.5 and above and less than 7.5	B+
5.5 and above and less than 6.5	B
4.5 and above and less than 5.5	C
4.0 and above and less than 4.5	D
less than 4.0	F

XIV. ATTENDANCE REQUIREMENT

60% Attendance is required in each semester to attend the end semester examination.

- Those who secure the minimum attendance in a semester alone will be allowed to register for the End Semester Examination.
- Condonation of attendance to a maximum of 10 days in a Semester subject to a maximum two spells within a Programme will be granted by the Vice-Chancellor.
- Benefit of Condonation of attendance will be granted to the students on health grounds, for participating in University Union activities, meetings of the University Bodies and participation in extra-curricular activities on production of genuine supporting documents with the recommendation of the Head of the Department concerned.
- A Student who is not eligible for condonation shall repeat the course along with the subsequent batch, in the same department /school by allocating additional seats even if there is no vacancy in the batch concerned. with a maximum limit of 10% of the total seats over and above the sanctioned strength.

- Female students who completed 18 years can avail maternity leave only once during the entire duration of the Programme for a maximum period of 60 days including holidays for pre-natal and post-natal period.
- Female students can avail Menstrual Leave with 2% lesser attendance than the existing percentage of attendance required.

WORK LOAD- SEMESTER I

Course code	Course Name	Core/Elective	Credit			Teaching Hours			Assessment	
			L/T	P/I	Total	L/T	P/I	Total	CE	ESE
MAECO01DSC01	Microeconomic Theory	DSC	2	2	4	30	60	90	40	60
MAECO01DSC02	Macroeconomic Theory	DSC	2	2	4	30	60	90	40	60
MAECO01DSC03	Development Issues of Indian Economy with special reference to Kerala	DSC	2	2	4	30	60	90	40	60
MAECO01DSC04	Quantitative Techniques for Economic Analysis	DSC	1	3	4	15	90	105	40	60
	Elective	DSE	1	2	3	15	60	75	40	60
	Total				19	120	330	450	200	300

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

WORK LOAD- SEMESTER II

Course code	Course Name	Core/Elective	Credit			Teaching Hours			Assessment	
			L/T	P/I	Total	L/T	P/I	Total	CE	ESE
MAECO02DSC05	Research Methodology	DSC	3	1	4	45	30	75	40	60
MAECO02DSC06	Mathematical Economics	DSC	2	2	4	30	60	90	40	60
MAECO02DSC07	International Economics	DSC	3	1	4	45	30	75	40	60
	Elective	DSE	2	1	3	30	30	60	40	60

	Elective	DSE	2	1	3	30	30	60	40	60
	SEC / AEC		1	1	2	15	30	45	40	60
	SEC / AEC		1	1	2	15	30	45	40	60
	Total				22	210	240	450		

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

WORK LOAD- SEMESTER III

Course code	Course Name	Core/Elective	Credit			Teaching Hours			Assessment	
			L/T	P/I	Total	L/T	P/I	Total	CE	ESE
MAECO 03DSC08	Environmental Economics	DSC	3	1	4	45	30	75	40	60
MAECO 03DSC09	Political Economy	DSC	3	1	4	45	30	75	40	60
MAECO 03DSC10	Econometrics	DSC	1	3	4	15	90	105	40	60
	Elective	DSE	2	1	3	30	30	60	40	60
	Multidisciplinary/Interdisciplinary Course	-	3	1	4	45	30	75	40	60
MAECO 03DSC11	Internship at Research Institutions/Industry Field Visit/Minor Projects outside the university	DSC			2					
	Value added Course	Credits from VAC will be over and above the minimum credits			2	-	60	60	40	60
		Total			21			450		

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

SEMESTER IV

Course	Course Name	Core/Elective	Credit	Teaching Hours	Assessment
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code										
			L/T	P/I	Total	L/T	P/I	Total	CE	ESE
MAECO 04DSC12	Financial Institutions and Markets	DSC	3	1	4	45	30	75	40	60
MAECO 04DSC13	Economics of growth and development	DSC	3	1	4	45	30	75	40	60
	Elective	DSE	2	1	3	30	30	60	40	60
	Elective	DSE	2	1	3	30	30	60	40	60
MAECO 04DSC14	Project	DSC		6	6		180	180	40	60
	Total				20			450		

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End

Semester Evaluation

MICROECONOMIC THEORY

Course Description

The course is divided into four modules which cover recent developments of the theory of consumer behaviour, theory of production, theory of firm and institutions, product pricing and welfare economics.

Course Objectives

1. The course is proposed to give a decent understanding and base to the students in applying the ideas and techniques for microeconomics in the practical field.
1. The expansive destinations of the course is to prepare the students themselves in a complete way with the different parts of the conventional Microeconomic hypothesis just as the most recent improvements in this field and the utilizations of speculations in investigating current monetary issues and to build up the capacity to orchestrate information.
2. To familiarize the students in dynamic with regards to advertise association, intricacy, vulnerability and instructive asymmetry; give experiences into advancements in the regions of general balance and government assistance financial matters
3. To prepare the students to apply microeconomic standards in the regions of trade and government assistance.

SEMESTER I DISCIPLINE SPECIFIC CORE COURSE

Course Code: MAECO01DSC01

Course Name: MICROECONOMIC THEORY

Credit			Teaching Hours			Assessment	
L/T	P/I	Total	L/T	P/I	Total	CE	ESE
2	2	4	30	60	90	40	60

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

CO Number	CO Statement
CO 1	Distinguish between traditional and modern business firms
CO 2	Discuss the demand function, consumer surplus, profit functions and cost functions
CO 3	Analyse utility maximization, profit maximization and cost minimization behaviour
CO 4	Get an interest in the application of economics for business decision, planning and forecasting, test the significance of game theory
CO 5	Application of collusive and non-collusive behaviour in oligopoly market

COURSE CONTENTS

Module 1

Theory of Consumer Choice-I:

- 1.1 Risk and uncertainty in demand choices – measuring risk
- 1.2 Attitudes towards risk
- 1.3 Neumann-Morgenstern method of constructing utility index
- 1.4 Friedman-Savage hypothesis
- 1.5 Trade- off between risk and return
- 1.6 State preference theory

Theory of Consumer Choice-II:

- 1.7 Recent developments in the theory of market demand: Attribute theory of demand
- 1.8 Inter temporal choice of consumption
- 1.9 Pragmatic approach to demand analysis – constant elasticity demand function –linear expenditure system
- 1.10 Distributed lag models of demand

Suggested readings

1.1, 1.2, 1.3, 1.4, 1.5 & 1.6 Dominick Salvatore. 2003. *Microeconomics: Theory and Applications*. Oxford University Press.

1.7, 1.8, 1.9 & 1.10 Koutsiyannis, A (2013), *Modern Microeconomics*, Macmillan Press, London

Module 2

Theory of Production & Cost:

- 2.1 Production function – homogeneous production function
- 2.2 Cobb- Douglas production function – CES production function
- 2.3 Technical progress – equilibrium of the multi-product firm
- 2.4 Modern theories of cost
- 2.5 Linear programming problem
- 2.6 Input output analysis

Imperfect Market Structure and Market with Asymmetric Information:

- 2.7 Collusive and non-collusive oligopoly models
- 2.8 Duopoly models
- 2.9 Market for ‘lemons’
- 2.10 Market signaling-adverse selection-moral hazard-screening-principal agent problem
- 2.11 Efficiency wage theory

Suggested readings

2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7 & 2.8 Koutsiyannis, A (2013), *Modern Microeconomics*, Macmillan Press, London

2.9, 2.10 & 2.11 Robert S. Pindyck and Daniel L. Rubinfeld. 2003. *Microeconomics*. Prentice Hall of India.

Module 3

Extension of the traditional theory of the firm:

- 3.1 Baumol’s theory of sales revenue maximization
- 3.2 Marris’ model of the managerial enterprise
- 3.3 Williamson’s model of managerial discretion
- 3.4 Behavioural model of Cyert and March
- 3.5 Theory of games
- 3.6 Decision theory

Theory of product pricing:

- 3.7 Basic assumptions underlying the traditional theory of pricing
- 3.8 Hall and Hitch report and the ‘full cost’ pricing principle
- 3.9 Bain’s limit-pricing theory
- 3.10 Model of Sylos- Labini
- 3.11 Model of Franco Modigliani

Suggested readings

3.1 to 3.5, 3.7 to 3.11 Koutsiyannis, A (2013), *Modern Microeconomics*, Macmillan Press, London

3.6 William J. Baumol. 2000. *Economic Theory and Operations Analysis*. Prentice Hall of India Pvt.Ltd.

Module 4

Theory of distribution:

- 4.1 Neoclassical approach to distribution- Marginal productivity theory
- 4.2 Keynesian or Neo Keynesian theories of distribution or Alternative distribution theories
- 4.3 Classical theories of distribution
- 4.4 Modern theory of distribution or post Keynesian theory of distribution

General equilibrium and Welfare Economics:

- 4.5 Walrasian general equilibrium
- 4.6 Two-factor, two-commodity, two-consumer general equilibrium model
- 4.7 Existence, uniqueness and stability of general equilibrium
- 4.8 Brouwer's fixed point theorem
- 4.9 Criteria's of old social welfare economics
- 4.10 Point of constrained bliss-theory of second best
- 4.11 New welfare economics
- 4.12 Social welfare function- Bergson-Samuelson-Arrows impossibility theorem
- 4.13 Pigouvian welfare economics.

Suggested readings

- 4.1 to 4.4 G. C. Da Costa. 1992. *Value and Distribution in Neoclassical and Classical Systems*. Himalaya Publishing House, Second Edition.
- 4.2 to 4.13 Koutsoyiannis A. 1979. *Modern Microeconomics*, Mac Millan.

Core Compulsory Readings

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

Core Suggested Readings

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

TEACHING LEARNING STRATEGIES

Lecture method

Problem solving method

MOODLE & ICT

MODE OF TRANSACTION

Offline (face-to-face mode)/ online

ASSESSMENT RUBRICS

End Semester Evaluation	60 Marks
Continuous Evaluation	40 Marks
Assignment	8
Seminar	16
Test	16

Sample Questions to test Outcomes.

1. Examine neoclassical theory of the firm.
2. Examine the constant elasticity of demand function.
3. What conclusions can you draw the managerial discretionary theory?
4. Analyze the importance of game theory to business decisions.
5. Evaluate decision making situations with an example.
6. Assess non collusive models of oligopoly.

Mapping of COs with POs & PSOs

Course Outcomes	Programme Outcomes					Programme Specific Outcomes			
	PO 1	PO 2	PO 3	PO 4	PO 5	PSO 1	PSO 2	PSO 3	PSO 4
CO 1	N	M	S	N	M	M	S	W	M
CO 2	M	M	S	S	M	S	S	S	S
CO 3	M	M	S	S	M	S	S	S	S
CO 4	S	S	S	S	S	S	S	M	S
CO 5	N	M	S	N	M	M	S	W	M

*S-Strong correlation, M-Moderate correlation; W- Weak correlation, N – No correlation

MACROECONOMIC THEORY

Course Description

The Macroeconomic course discusses the underlying macroeconomic features of a modern economy. At an advanced level, it provides an evolutionary perspective of the modern macroeconomic subject by focusing on the major schools of macroeconomic thought. The course will equip the students with the various macroeconomic variables required for measuring the economic performance by giving special reference to the Indian economy. The course also analyses the current focus of macroeconomic policy making in an open economy.

Course Objectives

1. Evaluate the functioning of the economy and its measurement
2. Examine the genesis of the modern macroeconomic subject
3. Analyse the theoretical basis underlying the major schools of macroeconomic thought
4. Examine the role of fiscal and monetary policy in an open economy

SEMESTER I

DISCIPLINE SPECIFIC CORE COURSE

Course Code: MAECO01DSC02

MACROECONOMIC THEORY

Credit			Teaching Hours			Assessment	
L/T	P/I	Total	L/T	P/I	Total	CE	ESE
2	2	4	30	60	90	40	60

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

PROGRAMME OUTCOMES (PSO) relevant to this course

PO (1), PO (2), PO (3), PO (6), PO (7)

PROGRAMME SEPCIFIC OUTCOMES (PSO) relevant to this course

PSO (1) Knowledge of the evolution of the economic theory

PSO (2) Knowledge of the functioning of the modern economy and its measurement using various indicators

COURSE OUTCOMES

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

C01	Explain how macroeconomics has evolved as a major discipline.
C02	Detail the various schools of macroeconomic thought
C03	Examine how fiscal and monetary functions impact the economy.
C04	Compare the functioning of a closed economy and an open economy
C05	Evaluate the basic concepts of macroeconomics and compute its performance.

*Course outcomes based on revised blooms taxonomy

COURSE CONTENTS

Module 1 (15 hours)

- 1.1 Subject matter of Macroeconomics: Its Origin, Development and Current State
- 1.2 Measuring the Economy's Performance
- 1.3 Overview of National Accounting - Methods of Income estimation – Satellite accounts.
- 1.4 Determination of output – Classical Versus Keynesian schools of macroeconomic thought.

Suggested readings specific to the module.

- 1.1. *Brian Snowdon and Howard R Vane: Modern Macroeconomics: Its Origin, Development and Current State, 2005. Edward Elgar*
- 1.2. *Rudiger Dornbusch and Stanley Fischer and Richard Startz: Macroeconomics, 2018. McGraw Hill*
- 1.3. *Richard T. Froyen. Macroeconomics: Theories and Policies, 10th Edition. Pearson*
- 1.4. *Soumen Sikdar: Principles of Macroeconomics, OUP India*

Module 2 (15 hours)

- 2.1 Policy Impacts of ISLM model
- 2.2 The Neoclassical synthesis – ISLM and AD-AS Models
- 2.3 Theories of Consumption
- 2.4 Theories of Investment

Suggested readings specific to the module.

- 2.1 *Richard T. Froyen. Macroeconomics: Theories and Policies, 10th Edition. Pearson*
- 2.2 *Gregory Mankiw. Macroeconomics, 5th Edition, Worth Publishers, 2002.*

2.3 Rosalind Levasic and Alexander Rebmann. *Macro Economics: An Introduction to Keynesian Neoclassical Controversies*. London: The Macmillan Press Ltd.

2.4 Brian Snowdon and Howard R Vane: *Modern Macroeconomics: Its Origin, Development and Current State*, 2005. Edward Elgar

Module 3 (15 hours)

3.1 The Monetary School & The New Classical School

3.2 The New Keynesian School & The Real Business Cycle school

3.3 The Supply Side Economics

3.4 The Structuralist School

Suggested readings specific to the module.

3.1 Richard T. Froyen. *Macroeconomics: Theories and Policies*, 10th Edition. Pearson

3.2 Edmund S. Phelps: *Seven Schools of Macroeconomic Thought*. OUP

3.3 Brian Snowdon and Howard R Vane: *Modern Macroeconomics: Its Origin, Development and Current State*, 2005. Edward Elgar

3.4 Gregory Mankiw. *Macroeconomics*, 5th Edition, Worth Publishers, 2002.

Module 4 (15 hours)

4.1 Long run growth - Neoclassical growth models

4.2 Money, banking and the Conduct of Monetary Policy

4.3 Policy in an Open Economy - Aggregate Price Level - Inflation - Economic Growth

4.4 Macroeconomic goals in the current economy – Indian experience

Suggested readings specific to the module.

4.1 Rudiger Dornbusch and Stanley Fischer and Richard Startz: *Macroeconomics*, 13th Edition, 2018.

4.2 Gregory Mankiw. *Macroeconomics*, 5th Edition, Worth Publishers, 2002.

4.3 Phelps, E. S. (2008). *MACROECONOMICS FOR A MODERN ECONOMY*. *The American Economist*, 52(1), 3–22. <http://www.jstor.org/stable/40657692>

4.4 Mohanty, D. (2011). *How does the Reserve Bank of India Conduct its Monetary Policy?* *Reserve Bank of India Bulletin*. Available at <https://rbidocs.rbi.org.in/rdocs/Bulletin/PDFs/06SPBL100811.pdf>

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

Richard T. Froyen. Macroeconomics: Theories and Policies, 10th Edition. Pearson

Gregory Mankiw. Macroeconomics, 5th Edition, Worth Publishers, 2002.

Rudiger Dornbusch and Stanley Fischer and Richard Startz: Macroeconomics, 13th Edition, 2018.

Edmund S. Phelps: Seven Schools of Macroeconomic Thought. OUP

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

Soumen Sikdar: Principles of Macroeconomics, OUP India

Rosalind Levasic and Alexander Rebmann. Macro Economics: An Introduction to Keynesian Neoclassical Controversies. London: The Macmillan Press Ltd.

<https://mru.org/principles-economics-macroeconomics-0>

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

Nicoli Natrass & G. Visakh Varma: Macroeconomics Simplified Understanding Keynesian and Neoclassical Macroeconomic Systems, Sage 2014.

Errol Dsouza: Macroeconomics, Pearson, 2009.

Eugene Diulio. Theory and Problems of Macro Economics. Singapore: Schaum's OutlineSeries. McGraw Hill Publishing Company

<https://ocw.mit.edu/courses/14-06-intermediate-macroeconomic-theory-spring-2003/>

<https://www.core-econ.org/>

<https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=NEp/xikgBgNtfA+sgFQAcA==>

TEACHING LEARNING STRATEGIES

- **Flipped classroom**
- **Active learning**
- **Digital learning**
- **Group/Team work**

MODE OF TRANSACTION

- **Hybrid**

ASSESSMENT RUBRICS Marks

End Semester Evaluation	60
Continuous Evaluation	40
Seminar	16
Exams (2)	16
Assignment	8

Sample Questions to test Outcomes.

1. Explain the concept of GVA
2. Examine the classical theories of money and interest rate
3. Derive autonomous expenditure multiplier and autonomous expenditure in simple Keynesian closed and open economy models
4. Construct IS and LM schedules and bring the product and money market equilibrium
5. Detail the major arguments of the New Classical school & explain the concept of rational expectations.
6. Discuss the major features of the neoclassical growth model

Mapping of Course Outcomes to PSOs/POs

	PSO1	PSO2	PO1	PO2	PO3	PO6	P07
CO1	3	1	2	1	3	3	3
CO2	2	2	2	1	3	3	3
CO3	1	3	2	3	3	3	3
CO4	2	1	2	3	3	3	3
CO5	1	3	2	3	3	3	3

**DEVELOPMENT ISSUES OF INDIAN ECONOMY
(WITH SPECIAL REFERENCE TO KERALA)**

Course Description

The course is divided into four modules which cover Growth Vs Development Agriculture & Industry, India & Global Economy and A profile of Kerala Economy since its formation.

Course Objectives

1. The course aims to provide a better orientation and a deeper understanding about the development issues of Indian economy with a special focus on Kerala.
2. It specifically targets to focus on issues like poverty, unemployment, inequality and regional economic integration and problems connected with agriculture industry, foreign trade and balance of payment.
3. The course also aims to impart a detailed profile about the government policy pertains to Agriculture, industry and inclusive growth and development etc.
4. To know more about the development issues, dimension of changes, and policies with respect to the development of Kerala economy.

SEMESTER I

DISCIPLINE SPECIFIC CORE COURSE

Course Code: MAECO01DSC03

Course Name: DEVELOPMENT ISSUES OF INDIAN ECONOMY

(WITH SPECIAL REFERENCE TO KERALA)

Credit			Teaching Hours			Assessment	
L/T	P/I	Total	L/T	P/I	Total	CE	ESE
2	2	4	30	60	90	40	60

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

CO1	Understand the concept of growth and development as well as the deeper knowledge of development issues of Indian economy such as Poverty, Unemployment and Inequality.
CO2	Acquire In-depth knowledge about the sectoral contributions of agriculture, industry and service sector in India.
CO3	Learn more about the relation of the India with global economy and economic development in the Indian context.
CO4	Understand the dimension of changes, issues and policies with respect to development of Kerala Economy.
CO5	Will gain Conceptual clarity on various dimensions of economic growth and development.

COURSE CONTENTS

Module 1

- 1.1 Growth Vs Development: Concept
- 1.2 Measurement and Problems-basic need approach
- 1.3 Sustainable Development
- 1.4 Structural changes in Indian Economy since independence
- 1.5 Washington Consensus
- 1.6 Structural adjustment Programme
- 1.7 Second Generation Reform
- 1.8 Demographic Changes: Trends and pattern- -demographic dividend

Suggested readings

- A P Thirlwall. 1999. Growth and Development. 6th Edition. Macmillan Press Ltd.
- Vijay Joshi and IMD Little.1991 and 2001.India's Economic Reforms. New Delhi: OUP.
- Nayyar Deepak. 2008. Liberalization and Development: Collected Essays. New Delhi: OUP.
- Manusinghe Mohan (2009) Sustainable development in Practice, Cambridge University Press
- Bhagavathi Jagadish. 1993. India in Transition. New Delhi: OUP.
- BimalJalan: 1992. Indian Economic Crisis: The Way Ahead. New Delhi: OUP.
- AmartyaSen. 1982. Poverty and Famine: An Essay on Entitlement and Deprivation. NewDelhi
- The Standard of Living: Tanner Lectures – CUP.1987 and 2002. India Development and Participation. New Delhi: OUP,
- A Sen. 1973.On economic inequality. Oxford: Clanderon Press.
- RBI (website: rbi.org). Database on Indian Economy

- 1.1 Poverty, Unemployment and inequality-- Concepts and measurements
- 1.2 Trend and approaches of Poverty
- 1.3 Amartya Sen. – Entitlement and standard of living approach
- 1.4 Capability approach to poverty
- 1.5 Magnitude of unemployment
- 1.6 An assessment of poverty alleviation and employment generation programmes
- 1.7 Inequality–measurements-trends.

Module 2

2.1 Agriculture & Industry –changing interrelations

2.2 Terms of trade between Industry & Agriculture

2.3 New agricultural policies and agrarian crisis

2.4 Revolution in agriculture

2.5 Food Security

2.6 National Food Security Mission

2.7 Growth and Pattern of industrial development

2.8 Industrial policies

2.9 Privatization and Disinvestment

Suggested readings

- Robert, E B Lucas, and Gustar F Papanec. 1989.Indian Economy: Recent Developments and Future Prospects. New Delhi: OUP.
- A D N Bajpai, S K Chaubey, N G Pendsc, and S K Shrivastava. 2007. Emerging Trends in Indian Economy. New Delhi: Atlantic Publishers & Distributors.
- Basu, Kaushik. 2004. India’s emerging economy. New Delhi: OUP.
- Puri V K,Misra S K and Garg Bharat(2022) Indian Economy, New Delhi: Himalaya Publishing House.
- Bhattacharya D N(2012)Indian Economic Development: contemporary issues, New Delhi: Regal Publications,
- Bimal Jalan. 2000. India’s Economic Policy Preparing for the 21st Century. 1996. New Delhi: Penguin.
- Patnaik, Prabhat. 1988. Time, Inflation And Growth: Some Macroeconomic Themes In An Indian Perspective (R.C. Dutt Lectures On Political Economy, 1984). Orient Longman.
- S. S. Tarapore. 2000 and 2006.Issues in Financial Sector Reforms. New Delhi:UBS Publishers and Distributors Ltd.,
- C. Ram manohar Reddy.2017. Demonitization and Black Money.Orient BlackSwan publication.
- Tamal Bandyapadhyay .2017.From Lahman to Demonetization: A Decade of Disruptions. Reforms and Misadventures. Penguin Books India Pvt. Ltd.
- Uma Kapila.2018. Indian Economy Since Independence: A Comprehensive And Critical Analysis of India’s Economy 1947-2018.Academic Foundation.
- Stanton, C. T., Thomas, C. Missing Trade in Tasks: Employer Outsourcing in the Gig Economy Harvard Business School Working Paper, 2019.

2.1 An overview of Service Sector in India

2.2 Growth and contribution- Infrastructure -Transport - Energy – Telecommunication

2.3 Technologies– Information Technology

2.4 Research and Development

2.4 Health and Education - Recent developments

2.5 NITI Aayog

2.6 Inclusive growth

2.7 Micro finance

2.8 Gig economy

2.9 MGNREGA

2.10 NRHM-Ayushman Bharath

Module 3

3.1 India & Global Economy

3.2 India's share in global trade

3.3 Recent developments in India's external sector

3.4 BOP position and problems of India

3.5 Capital Account Convertibility

3.6 Balance of Trade (Export and Import)

Suggested readings

- Robert, E B Lucas, and Gustar F Papanek. 1989.Indian Economy: Recent Developments and Future Prospects. New Delhi: OUP.
- Basu, Kaushik. 2004. India's emerging economy. New Delhi: OUP.
- Ruddar Dutt and Sundaram (2016): Indian Economy, S Chand and Company, New Delhi
- S. S. Tarapore. 2000 and 2006.Issues in Financial Sector Reforms. New Delhi:UBS Publishers and Distributors Ltd.,
- C. Ram manohar Reddy.2017. Demonitization and Black Money. Orient Black Swan publication.
- Tamal Bandyopadhyay .2017.From Lahman to Demonetization: A Decade of Disruptions. Reforms and Misadventures. Penguin Books India Pvt. Ltd.

3.1 Foreign Trade policy

3.2 Recent policy changes

3.3 Impact on Domestic Money Supply

3.4 Impact of Demonetization on Indian economy

3.5 Regional economic integration and Indian Economy.

Module 4

4.1 A profile of Kerala Economy since its formation

4.2 Model of Development & Sustainability of the model

4.3 Structural changes in Kerala Economy

4.4 Recent trends in economic Indicators

4.5 Demographic changes – ageing – health —poverty- unemployment

4.6 Migration—Labour migration-changing pattern of migration in Kerala-new trends-
policies

Suggested readings

- K.K George. 1993. Limits to Kerala Model of Development: an analysis of fiscal crisis and its implications. Trivandrum: CDS.
- Parayil, Govindan. 2000. Kerala: The Development Experience: Reflections On Sustainability And Replicability. Zed Books.
- Frank, Richard and T.M. Thomas Issac. 2000. Local democracy and Development: people's Plan for decentralized planning in Kerala.
- P. P. Pillai. 1994. Kerala Economy Four Decades of Development.
- M A Oommen. 1993. Essays on Kerala Economy. Oxford & IBH Publishing Company.
- B A Prakash. 1994. Kerala Economy Problems and Prospects. New Delhi: Sage Publications.
- Government of Kerala, State Planning Board, Kerala Economic Review for various years.

4.1 ICT and development

4.2 Tourism

4.3 Role of micro finance

4.4 Kerala's higher education

4.5 Fiscal Crisis

4.6 KIIFB

4.7 Knowledge economy

Core Compulsory Readings

- A P Thirlwall. 1999. Growth and Development. 6th Edition. Macmillan Press Ltd.
- Vijay Joshi and IMD Little. 1991 and 2001. India's Economic Reforms. New Delhi: OUP.
- Nayyar Deepak. 2008. Liberalization And Development: Collected Essays. New Delhi: OUP.

- Manusinghe Mohan (2009) Sustainable development in Practice, Cambridge University Press, Cambridge.
- Bhagavathi Jagadish. 1993. India in Transition. New Delhi: OUP.
- BimalJalan: 1992. Indian Economic Crisis: The Way Ahead. New Delhi: OUP.
- AmartyaSen. 1982. Poverty and Famine: An Essay on Entitlement and Deprivation. NewDelhi: OUP.
- The Standard of Living: Tanner Lectures – CUP.1987 and 2002. India Development and Participation. New Delhi: OUP,
- A Sen. 1973.On economic inequality. Oxford: Clanderon Press.
- RBI (website: rbi.org). Database on Indian Economy
- Robert, E B Lucas, and Gustar F Papanack. 1989.Indian Economy: Recent Developments and Future Prospects. New Delhi: OUP.
- A D N Bajpai, S K Chaubey, N G Pendsc, and S K Shrivastava. 2007. Emerging Trends in Indian Economy. New Delhi: Atlantic Publishers & Distributors.
- Puri V K,Misra S K and Garg Bharat(2022) Indian Economy, New Delhi: Himalaya Publishing House.
- Bhattacharya D N(2012)Indian Economic Development: contemporary issues, New Delhi: Regal Publications,
- Bimal Jalan. 2000. India's Economic Policy Preparing for the 21st Century. 1996. New Delhi: Penguin.
- Patnaik, Prabhat. 1988. Time, Inflation And Growth: Some Macroeconomic Themes In An Indian Perspective (R.C. Dutt Lectures On Political Economy, 1984). Orient Longman.
- S. S. Tarapore. 2000 and 2006.Issues in Financial Sector Reforms. New Delhi:UBS Publishers and Distributors Ltd.,
- C. Ram manohar Reddy.2017. Demonitization and Black Money.Orient BlackSwan publication.
- Tamal Bandyapadhyay .2017.From Lahman to Demonetization: A Decade of Disruptions. Reforms and Misadventures. Penguin Books India Pvt. Ltd.
- Uma Kapila.2018. Indian Economy Since Independence: A Comprehensive And Critical Analysis of India's Economy 1947-2018.Academic Foundation.
- Stanton, C. T., Thomas, C. Missing Trade in Tasks: Employer Outsourcing in the Gig Economy Harvard Business School Working Paper, 2019.
- Basu, Kaushik. 2004. India's emerging economy. New Delhi: OUP.

- Ruddar Dutt and Sundaram (2016): Indian Economy, S Chand and Company, New Delhi
- S. S. Tarapore. 2000 and 2006. Issues in Financial Sector Reforms. New Delhi: UBS Publishers and Distributors Ltd.,
- K.K George. 1993. Limits to Kerala Model of Development: an analysis of fiscal crisis and its implications. Trivandrum: CDS.
- Parayil, Govindan. 2000. Kerala: The Development Experience: Reflections On Sustainability And Replicability. Zed Books.
- Frank, Richard and T.M.Thomas Issac. 2000. Local democracy and Development: people's Plan for decentralized planning in Kerala.
- P. P. Pillai. 1994. Kerala Economy Four Decades of Development.
- M A Oommen. 1993. Essays on Kerala Economy. Oxford & IBH Publishing Company.
- B A Prakash. 1994. Kerala Economy Problems and Prospects. New Delhi: Sage Publications.
- Government of Kerala, State Planning Board, Kerala Economic Review for various years.

Core Suggested Readings

- Acharya Shanker and Mohan Rakesh. 2011. India's Economy: Performance and Challenges. New Delhi: Oxford University Press.
- Balakrishnan Pulpare. 2011. Economic Growth in India, History and Prospects. New Delhi: Oxford University Press.
- Angrej Sing Rana. 2017. Recent Advances in Indian Economy. Delhi: Swastic Publication Limited.
- Uma Kapila. 2018. Indian Economy Since Independence: A Comprehensive And Critical Analysis of India's Economy 1947-2018. Academic Foundation.
- Nilanjan Banik. 2015. The Indian Economy: A Macro Economic Perspective. Sage Publications.
- Prankrishna Pal. 2008. Reforms and Structural Changes in India. Deep and Deep Publication Pvt. Ltd.
- Shivani Jaswal, Isha Jaswal, and Manisha Raj. 2012. Structural Transformations of Indian Economy. Lambert Academic Publishing.
- Rama P Kanungo, Chris Rowley, and Anurag N. Banerjee. 2018. Changing the Indian Economy, Renewal, Reform and Revival. copy right© Elsevier B.V.
- Rabindra Kumar Misra. 2017. Indian Economy: Past, Present and Future. New Delhi: Avon Publications.

- Government of India.Economic Survey for various years.
- RBI.Handbook of Statistics for various years.
- A Vaidyanathan .2009.Agricultural Growth in India. New Delhi: Oxford University Press. AN
- Agarwal. 2001.Indian Economy: Problems of Development and Planning. New Delhi: Wishwa Publication.
- Byres TJ (Ed) (1998), The Indian Economy: Major Debates since Independence, Oxford University Press, New Delhi.
- Jalan, B. (1992), The Indian Economy – Problems and Prospects, Viking, New Delhi
- Nilanjan Banik. 2015. The Indian Economy: A Macro Economic Perspective. Sage Publications.
- J K Mishra and V K Puri (2014): Indian Economy: The Development Experience, Himalaya Publishing House, Mumbai
- NITI Aayog. (2022). India’s Booming Gig and Platform Economy: Perspectives and Recommendations on the Future of Work. June, 2022.
- Government of India, Economic Survey (Annual Issues), Ministry of Finance, New Delhi.
- Janakarajan S, Venktachalam L and Maria Saleth R.2015.Indian Economy in Transition: Essays in Honour of C.T Kurien. Sage Publication.
- Shivani Jaswal, Isha Jaswal, and Manisha Raj. 2012. Structural Transformations of Indian Economy. Lambert Academic Publishing.
- Rama P Kanungo, Chris Rowley, and Anurag N. Banerjee. 2018.Changing the Indian Economy, Renewal, Reform and Revival. copy right© Elsevier B.V.
- RBI monthly bulletin.
- OECD Economic Surveys-India. 2017.
- Government of India. NSSO reports-various rounds. Ministry of Statistics and Programme Implementation.
- B.A. Prakash.2012. Indian Economy since 1991. New Delhi: Dorling Kindersly.
- B.A. Prakash and Jerry Alwin 2018.Kerala’s Economic Development Emerging Issue and Challenges. New Delhi: Sage publications.
- Meerabai M (2008) Kerala Economy: slumber to performance, New Delhi: Serials publications.

TEACHING LEARNING STRATEGIES

- Lecture method
- Discussion/ Debate
- MOODLE
- ICT

MODE OF TRANSACTION

- Offline (face-to-face mode)/ online

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

Sample Questions to test Outcomes.

- 1.Examine the recent trends the measurement of inequality in India
- 2.How poverty and unemployment act as a hurdle in the way of development of indian economy.
- 3.Assess the contribution of service sector towards the development of India in the current era.
- 4.Examine the problem of ageing and how it affects the health sector of Kerala?
- 5.Analyse the recent trends in the changing pattern of migration in Kerala.

Mapping of COs with POs & PSOs

Course Outcomes	Programme Outcomes					Programme Specific Outcomes			
	PO 1	PO 2	PO 3	PO 4	PO 5	PSO 1	PSO 2	PSO 3	PSO 4
CO 1	N	M	S	N	M	M	S	W	M
CO 2	M	M	S	S	M	S	S	S	S
CO 3	M	M	S	S	M	S	S	S	S
CO 4	S	S	S	S	S	S	S	M	S
CO 5	N	M	S	N	M	M	S	W	M

*S-Strong correlation, M-Moderate correlation; W- Weak correlation, N – No correlation

QUANTITATIVE TECHNIQUES FOR ECONOMIC ANALYSIS

Course Description

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

PROGRAMME OUTCOMES (PO) relevant to this course

PO1, PO2, PO4, PO6, P07

PROGRAMME SEPCIFIC OUTCOMES (PSO) relevant to this course

PSO (1) Knowledge of the various mathematical and statistical tools for economics analysis

PSO (2) Knowledge of the basic computational skills for socio economic data analysis

PSO (4) analysing various economic phenomenon with the help of quantitative techniques

PSO (5) Attain competitive edge in mastering quantitative skills

SEMESTER I

DISCIPLINE SPECIFIC CORE COURSE

COURSE CODE – MAECO01DSC04

Course Name: QUANTITATIVE TECHNIQUES FOR ECONOMIC ANALYSIS

Credit			Teaching Hours			Assessment	
L/T	P/I	Total	L/T	P/I	Total	CE	ESE
1	3	4	15	90	105	40	60

Lecture/Tutorials, P/I=Practical, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

C01	Understand various types of mathematical models, methods and statistical tools for economic data analysis
C02	Understand basics of sampling, probability theory and theory of estimation
C03	Evaluate data and apply suitable quantitative techniques on various theoretical distribution
C04	Creating and testing statistical hypothesis with various statistical tests

C05	Analyse secondary data using statistical and mathematical techniques
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***Course outcomes based on revised blooms taxonomy**

COURSE CONTENTS

Module 1 (30 hours) **Matrices**

- 1.1 Basic operations, Addition, Subtraction and Multiplication of matrices
- 1.2 Determinant of matrices-Inverse matrices-Rank of a matrix
- 1.3 Solving Linear equations with the inverse
- 1.4 Cramer's rule for matrix solutions
- 1.5 Solution of simultaneous equations using Cramer's Rule.

Suggested readings specific to the module.

- 1.1 David A Harville. 2001. *Matrix Algebra -Exercises and Solutions*, Springer, New York
- 1.2 Taro Yamane 1962 *Mathematics for Economists- An Elementary Survey*, Prenticehall
- 1.3 Bowers David.1984 *Statistics for Economics*. Macmillan.
- 1.4 Alpha C. Chiang and Kevin Wainwright. 2017. *Fundamental Methods of Mathematical Economics*. McGrawHill education.4th edition

Module 2 (30 hours) **Probability theory:**

- 2.1 Concept of probability- Different approaches to probability
- 2.2 Theorems of Probability: Addition and Multiplication Theorem
- 2.3 Conditional Probability –Bayes' theorem
- 2.4 Random variables and Probability distribution, Mathematical expectation
- 2.5 Probability Distributions: Discrete and Continuous Distributions
- 2.6 Binomial, Poisson, Normal distributions-properties and applications

Suggested readings specific to the module.

- 2.1 Murray R Spigel. 1998. *Probability Theory*. Schaums Outline Series. Mcgraw hill
- 2.2 Murray R Spigel.1975. *Theory and problems of Probability and Statistics* Schaums Outline Series.Mcgraw hill
- 2.3 Gupta.S.P. 2012 *Statistical Methods*. New Delhi: Sulthan Chand and Sons.
- 2.4 Damodar Gujarathi.2008. *Basic Econometrics*.5th edition.
- 2.5 Agarwal, Bharadwaj and Gupta. 1996. *Quantitative techniques in Economics*. Kalyani Publications.

Module 3 (15 hours) **Population and Sample:**

- 3.1 Population- sampling and sample designs
- 3.2 Theoretical basis of sampling-methods of sampling- Statistic

3.3 Sampling Distribution and standard Error

3.4 Central limit theorem-Distribution of Sample mean

3.5 Theory of Estimation: Point estimation and Interval Estimation-Properties of good estimator.

Suggested readings specific to the module.

3.1 Willaim.G. Kochran.2007. *Sampling Techniques*.Wiley India.

3.2 McClave James T, P.George Benson and Terry Sincich. 2000. *Statistics for Business and Economics*. Prentice Hall.

3.3 Speigal.M. R and Stephan LJ. 2008. *Theory and Problems of Statistics, 4th edition*Schaum's Outline Series McGraw Hill

3.4 Gupta.S.C.2000. *Fundamentals of Applied Statistics*. New Delhi: S.Chand.

Module 4

(30 hours)

Testing of hypothesis:

4.1 Types of hypotheses - Null and alternative hypothesis- Type I and Type II errors – Critical region –Level of significance-Power of test - Procedure of testing of hypothesis

4.2 Test of goodness of fit -Tests of significance for attributes

4. 3 Analysis of Variance techniques- F test and ANOVA –One-way and Two way classification

Suggested readings specific to the module.

4.1 Speigal.M. R. 2000. *Theory and problems of Statistics*. London: McGraw Hill.

4.2 Willaim.G. Kochran.2007. *Sampling Techniques*.Wiley India.

4.3Ajay.S. Gaur and Sanjay.S.Gaur. 2009. *Statistical Methods for Practice and Research*. Response Books.

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

- D N Elhance, 2018 *Fundamentals of Statistics*, Kitab Mahal, New Delhi, revised edition
- Kothari.C.R.2013. *Quantitative techniques*. New Delhi: Vikas publishing house. third edition
- Ajay.S.Gaur and Sanjay.S.Gaur. 2009. *Statistical Methods for Practice and Research*. Response books.
- Ralph B. D'Agostino and Michael A. Stephens,1986Goodness-of-fit techniques (eds). Marcel Dekker Inc.
- Conover WJ. *Practical Nonparametric Statistics*,1998 3rd edition, New York: John Wiley and Sons.
- Siegel and Castellan. 1988. "Nonparametric Statistics for the Behavioral Sciences," 2ndedition, New York: McGraw-Hill.

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

- Monga,G.S. 2003. *Mathematics and Statistics for Economists*. New Delhi: Vikas Publications.
- A.H. Smith and W. A. Albrecht.1966 *Fundamental Concepts of Analysis*, Prentice Hall.
- C.P.Simon and L.E. Blume.1994 *Mathematics for Economists*.WW Norton & Company

TEACHING LEARNING STRATEGIES

Flipped classroom

Active learning

Digital learning

Group/Team work

MODE OF TRANSACTION

- **Hybrid**

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

Sample Questions to test Outcomes.

1. State any two important properties of determinant of a matrix
2. Distinguish between point and interval estimation
3. Define an impossible event
4. Write a short note applications of Pareto distribution
5. Explain central limit theorem
6. Following table gives the number of units produced by two workers A and B for a number of days. Test the variance by using F test at 5 % level of significance.

A	34	28	42	37	44
B	36	33	48	38	50

11. Apply Chi- Square and test the relationship between Economic status and financial Autonomy at 5% significance level

	Status	
Autonomy	Rich	Poor
Autonomous	12	10
Not Autonomous	16	6

Mapping of COs with POs & PSOs

Course Outcomes	Programme Outcomes					Programme Specific Outcomes		
	PO 1	PO 2	PO 4	PO 6	PO 7	PSO 1	PSO 2	PSO 4
CO 1	S	S	M	S	S	S	S	S
CO 2	S	S	W	S	M	S	S	S
CO 3	S	S	M	S	S	S	S	S
CO 4	S	S	W	S	S	S	S	S
CO 5	S	S	M	S	M	S	S	S

*S-Strong correlation, M-Moderate correlation; W- Weak correlation, N – No correlation

RESEARCH METHODOLOGY

Course Description

Course Objectives

The course is divided into four modules which cover methods of research, formulation of research problem, research design, sources of data, types of sampling techniques and report writing.

2. The course aims to provide the students the fundamental edifice of social science research with broad spectrum of knowledge about the research process.
3. The paper generates the capability and skill on the part of students to prepare independent research project proposals which enable them to undertake research studies in future
4. The course aims to improve their basic academic skills and expertise required for undertaking research projects and research activities.

SEMESTER II

DISCIPLINE SPECIFIC CORE COURSE

Course Code: MAECO02DSC05

CREDIT- 4

Course Name: RESEARCH METHODOLOGY

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
3	1	4	45	30	75	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

CO1	Will learn and acquire the basic knowledge and methods of social science research.
CO2	Gain a thorough understanding of research problem, literature review, hypothesis formulation and research design.
CO3	Attain an in-depth skill to collect data, analyze and interpret it by using appropriate methods.
CO4	Enable to learn about data analysis, tools and techniques as well as the process of report writing.
CO5	Good capability and skill on proper methodological foundations of social research.
CO6	Attain mastery in drafting research reports, tools and techniques and derive conclusions and policy implications on topics of societal relevance and economic significance

COURSE CONTENTS

Module 1

1.1 Meaning of research

1.2 Type of research-applied and fundamental-analytical and descriptive- qualitative and quantitative-conceptual and empirical

1.3 Research methods and research methodology

1.4 The relation between theory and research

1.5 Positivism and post positive approach in research- interpretive research

Suggested readings

- Alan Bryman (2012). Social Research Methods, Oxford University Press.
- Deepak, Chawla, and Neenasondhi. 2016. Research Methodology Concepts and Cases. Noida: Vikas Publishing House Ltd.
- Sharlene, Nagy HesseBiber.2006 The practice of qualitative research. London: Sage Publishers
- Howard, Lane, Bruce L. 2017 Berg. Qualitative Research Methods for social research. Pearson.
- Ranjith, Kumar. 2014. Research Methodology A step by Step guide, London: Sage Publishers.
- Kothari, C R. 1990. Research Methodology, Methods and Techniques.New Delhi: Wiley Eastern Ltd.

1.1 Qualitative and content analysis

1.2 Ethnography and phenomenology

1. 3 Interdisciplinary research

1.4 Relevance of Social Science Research

1.5 Objectivity and ethics in social science research.

1.6 Criteria of good research and problems encountered by researchers in India

Module 2

- 2.1 Selection and formulation of research problem
- 2.2 Development of research hypothesis
- 2.3 Role of hypothesis
- 2.4 Criteria of good hypothesis
- 2.5 Survey of literature
- 2.6 Identification of Research Gaps and Research Needs

Suggested readings

- Francis, C Dane.2010 Evaluating Research methodology for people who need to Read Research. London: Sage Publishers
- Deepak, Chawla, and Neenasondhi. 2016. Research Methodology Concepts and Cases. Noida: Vikas Publishing House Ltd
- Howard, Lane, Bruce L Berg.2017 Qualitative Research Methods for social research. Pearson.
- Goode, W J, and P F Hatt. 1952. Methods in social Research. New York: McGraw hill Book Company.
- Young, Pauline. 1988. Scientific social surveys and research, New Delhi: Prentice Hall India Pvt.Ltd.

- 2.1 Research design
- 2.2 Types of research design
- 2.3 Exploratory and formulative, descriptive and diagnostic, evaluation and experimental, historical and survey design
- 2.4 Steps in the research process
- 2.5 Sample Selection
- 2.6 Sampling methods-random, stratified, multistage, systematic, cluster, quota, judgement, convenient, purposive samples

Module 3

- 3. 1 Uni-disciplinary, inter-disciplinary, multi-disciplinary methodologies
- 3. 2 Quantitative Research Methods
- 3. 3 Sources of data- primary and secondary data

Suggested readings

- Thomas C George (2020) Research methodology and scientific writing, New Delhi: Ane Books Pvt.Ltd
- Kapoor D Rand Pooja Saigal (2019) Research Methodology:Methods and Techniques,New Delhi:Regal publications

- Ranjith, Kumar. 2014. Research Methodology A step by Step guide, London: Sage Publishers.
- Deepak, Chawla, and Neenasondhi. 2016. Research Methodology Concepts and Cases. Noida: Vikas Publishing House Ltd.
- Lawrence Neuman (2010). Social Research Methods: Qualitative and Quantitative Approaches. Pearson Publishers.
- Kothari, C R. 1990. Research Methodology, Methods and Techniques. New Delhi: Wiley Eastern Ltd.
- Young, Pauline. 1988. Scientific social surveys and research, New Delhi: Prentice Hall India Pvt.Ltd.
- Economic Survey 2023
- RBI Bulletin
- Budget document 2023, Government of India

3.1 Major Research methods- historical research, ethnographic research, cross sectional study, longitudinal study, cohort study, correlational research, case study, action research, participatory learning and action, PLA tools

3.2 Observation method—focus group method- -personal interview method and projective techniques

3.3 Triangulation (including or mixing qualitative and quantitative) methods

Module 4

4.1 Sample survey

4.2 Methods- interview methods- questionnaire method

4.3 Constructing of questionnaire/interview schedule

4.4 Criteria for questionnaire designing

4.5 Physical characteristics of questionnaire- objectivity, reliability and validity of data

4.6 Data analysis and techniques

Suggested readings

- Kothari, C R. 1990. Research Methodology, Methods and Techniques. New Delhi: Wiley Eastern Ltd.
- Estelle, M Philipps, and D S, Pugh. 1993 How to get a Ph.D. New Delhi: UBS publishers and Distributors Ltd.
- Constantinos, N Phellas, Alice, Bloch, and Clive, Seale. 2011.Structured methods, interviews, questionnaires and observation.
- Sharma, KVS. 2001. Statistics made simple: Do it yourself. Prentice Hall India Private Ltd.
- G B, Singh. 2017. Research Methodology with SPSS. Jaipur: Paradise publishers.

Supplementary Reading

- Marc, Blaug. 1992. The Methodology of Economics or How Economics Explain. Cambridge University.
- PS, Mohanakumar. 1998. A Handbook on Research Methodology. Kudavechoor: Right Publishers

4.1 Hypothesis and testing

4.2 Scaling- problems and techniques-

4.3 Writing of report

4.4 References and bibliography

Core Compulsory Readings

- Alan Bryman (2012). Social Research Methods, Oxford University Press.
- Deepak, Chawla, and Neenasondhi. 2016. Research Methodology Concepts and Cases. Noida: Vikas Publishing House Ltd.
- Sharlene, Nagy HesseBiber. 2006 The practice of qualitative research. London: Sage Publishers
- Howard, Lane, Bruce L. 2017 Berg. Qualitative Research Methods for social research. Pearson.
- Ranjith, Kumar. 2014. Research Methodology A step by Step guide, London: Sage Publishers.
- Kothari, C R. 1990. Research Methodology, Methods and Techniques. New Delhi: Wiley Eastern Ltd.
- Francis, C Dane. 2010 Evaluating Research methodology for people who need to Read Research. London: Sage Publishers
- Goode, W J, and P F Hatt. 1952. Methods in social Research. New York: McGraw hill Book Company.
- Thomas C George (2020) Research methodology and scientific writing, New Delhi: Ane Books Pvt.Ltd
- Kapoor D Rand Pooja Saigal (2019) Research Methodology: Methods and Techniques, New Delhi: Regal publications
- Lawrence Neuman (2010). Social Research Methods: Qualitative and Quantitative Approaches. Pearson Publishers.
- Young, Pauline. 1988. Scientific social surveys and research, New Delhi: Prentice Hall India Pvt.Ltd.
- Economic Survey 2023
- RBI Bulletin
- Budget document 2023, Government of India

- Estelle, M Philipps, and D S, Pugh. 1993 How to get a Ph.D. New Delhi: UBS publishers and Distributors Ltd.
- Constantinos, N Phellas, Alice, Bloch, and Clive, Seale. 2011. Structured methods, interviews, questionnaires and observation.
- Sharma, KVS. 2001. Statistics made simple: Do it yourself. Prentice Hall India Private Ltd.
- G B, Singh. 2017. Research Methodology with SPSS. Jaipur: Paradise publishers. Supplementary Reading
- Marc, Blaug. 1992. The Methodology of Economics or How Economics Explain. Cambridge University.
- PS, Mohanakumar. 1998. A Handbook on Research Methodology. Kudavechoor: Right Publishers

Core Suggested Readings

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

TEACHING LEARNING STRATEGIES

- Lecture method
- Discussion
- MOODLE
- ICT

MODE OF TRANSACTION

- Offline (face-to-face mode)/ online

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16

Test	16
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Sample Questions to test Outcomes.

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

Mapping of COs with POs & PSOs

Course Outcomes	Programme Outcomes					Programme Specific Outcomes				
	PO 1	PO 2	PO 3	PO 4	PO 5	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO 1	N	M	S	N	M	M	S	W	M	M
CO 2	M	M	S	S	M	S	S	S	S	M
CO 3	M	M	S	S	M	S	S	S	S	M
CO 4	S	S	S	S	S	S	S	M	S	S
CO 5	N	M	S	N	M	M	S	W	M	M
CO 6	M	M	S	S	M	S	S	S	S	M

*S-Strong correlation, M-Moderate correlation; W- Weak correlation, N – No correlation

MATHEMATICAL ECONOMICS

Course Description

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

PROGRAMME OUTCOMES (PO) relevant to this course

PO1, PO2, PO6, P07

PROGRAMME SEPCIFIC OUTCOMES (PSO) relevant to this course

PSO (1) Knowledge of the various mathematical tools for economics analysis

PSO (2) Develop the analytical and mathematical skills related to various economic relationships.

PSO (4) Knowledge to integrate economic theories with mathematical techniques in research

PSO (5) Attain competitive edge in mastering mathematical skills for analyzing current economic issue

SEMESTER II

**DISCIPLINE SPECIFIC CORE COURSE
COURSE CODE - MAECO02DSC06**

Course Name: MATHEMATICAL ECONOMICS

CREDIT-4

Credit			Teaching Hours			Assessment	
L/T	P/I	Total	L/T	P/I	Total	CE	ESE
2/0	2/0	4	30	60	90	40	60

Lecture/Tutorials, P/I=Practical, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

C01	Understand various types of mathematical models , methods and mathematical tools for economic data analysis
C02	Understand basics of demand functions, production functions and other macro-economic models
C03	Creation and derivation of mathematical models related to market and behavioral economics
C04	Developing and analyzing mathematical models for economic theory

***Course outcomes based on revised blooms taxonomy**

COURSE CONTENTS

Module 1

(30 hours)

Basic concepts

- 1.1 Set theory
- 1.2 Mathematical relations and functions
- 1.3 Use of graphs and diagrams
- 1.4 Differential and Integral Calculus- basics

Suggested readings specific to the module.

- Allen R.G.D. 1956. *Mathematical Economics*. MacMillan Co. Ltd.
- Allen R.G.D.1967. *Macroeconomic Theory*. MacMillan Co. Ltd.
- Birchenhall.C. and Grout.P.1984.*Mathematics for Modern Economics*.Philip Alien. Oxford: Harness and Noble Books.
- J.M. Henderson and R.E.Quandt. 1980. *Microeconomic Theory a Mathematical Approach*. Me. Graw Hill International Ltd.

Module 2

(15 hours)

Theory of Demand:

- 2.1Maximization of utility and types of utility functions
- 2.2 Demand functions - Elasticity - Properties of demand functions
- 2.3 Slutsky equation
- 2.4 Linear expenditure systems
- 2.5 The problem of choice involving risk

Suggested readings specific to the module.

- Allen R.G.D.1967. *Macroeconomic Theory*.Macmillan Co. Ltd.
- Birchenhall.C. and Grout.P.1984.*Mathematics for Modern Economics*.Philip Alien. Oxford: Harness and Noble Books.
- J.M. Henderson and R.E.Quandt. 1980. *Microeconomic Theory a Mathematical Approach*. Me. Graw Hill International Ltd.

Module 3

(15 hours)

Theory of Production:

3.1 Production function

3.2 Cob-Douglas production function

3.3 CES production function

3.4 VES production function

3.5 Cost function: Derivation of cost as a function of output

3. 6 Input demand function

Suggested readings specific to the module.

- Yamane, Taro (1975), *Mathematics for Economists*, PHI, New Delhi.
- Allen, R.G.D.(1974), *Mathematical Analysis for Economists*, Macmillan Press, New Delhi.
- David. F. Heithfield and Soren Wibe.1987. *Introduction to Cost and Production Function*.,Macmillan Education Ltd.

Module 4

(30 hours)

Mathematical models related to Market and Behavioral Economics:

4.1 Market - Perfect Competition- Monopoly and applications

4.2 Oligopoly-duopoly market models

4.3 Theory of games

4.4 Behavioral economics-concepts and theories

Suggested readings specific to the module.

- J.M. Henderson and R.E. Quandt. 1980.*Microeconomic Theory a Mathematical Approach*.Me. Graw Hill International Ltd.
- Sydsaeter, Knut and Peter Hammond. 2002.*Essential Mathematics for Economic Analysis*.England : Prentice Hall: Harlow.
- Eugene Silberberg.1990. *The Structure of Economics a Mathematical Analysis* (Second Edition). Mc Graw Hill International (ed).
- Cunningham, Lawrence A. 2002. *Behavioral Finance and Investor Governance*. Washington & Lee Law Review.

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

- Edward T. Dowling, 2011. *Introduction to Mathematical Economics*. Schaum's Outline.
- Adam Ostaszewski and Kenneth Binmore, 1993. *Mathematics in Economics: Models and Methods*
- Monga, G.S. 2003. *Mathematics and Statistics for Economists*. New Delhi : Vikas Publications.
- C.P. Simon and L.E. Blume. 1994 *Mathematics for Economists*. WW Norton & Company
- Diamond, Peter; Vartiainen, Hannu (2012). *Behavioral Economics and Its Applications*. Princeton University Press.
- Hens, Thorsten; Bachmann, Kremena (2008). [Behavioural Finance for Private Banking](#). Wiley Finance Series.

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

- Michael Hoy. 2011. *Student's Solution Manual for Mathematics for Economics*.
- Akira Takayama. 1993. *Analytical Methods in Economics*.

Michael D. Intriligator. 1971. *Mathematical Optimization and Economic Theory*.

- A.H. Smith and W. A. Albrecht. 1966 *Fundamental Concepts of Analysis*, Prentice Hall.
- Krishna K.L. (ed.). 1997. *Econometric Applications in India*. New Delhi: Oxford University Press.
- Amitabh Kundu, et. Al. 1976. *Input Output framework and Economic Analysis*. New Delhi: Centre for the study of Regional Development.
- David. F. Heathfield and Soren Wibe. 1987. *Introduction to Cost and Production Function*, Macmillan Education Ltd.
- Handry, A.T. (1999), *Operations Research*, PHI, New Delhi.
- Layard, P.R.G. and Walters, A.W. (1978), *Microeconomic Theory*, McGrawHill, London.
- Stigler, G. (1996), *Theory of Price*, PHI, New Delhi.
- Varian, H.R. (2000), *Microeconomic Analysis*, W.W. Norton, New York
- Alpha C. Chiang- Kevin Wainwright. 2005. *Fundamental Methods of Mathematical Economics*.
- Lawrence E. Blume, Carl P. Simon . 1994. *Mathematics for Economists*.
- Shleifer, Andrei (1999). [Inefficient Markets: An Introduction to Behavioral Finance](#). New York: Oxford University Press.
- Thaler, Richard H (2016). ["Behavioral Economics: Past, Present, and Future"](#). American Economic Review.
- [Thaler, Richard H.](#); Mullainathan, Sendhil (2008). ["Behavioral Economics"](#). In [David R. Henderson](#) (ed.). [Concise Encyclopedia of Economics](#) (2nd ed.).

- Hogarth, R. M.; Reder, M. W. (1987). [Rational Choice: The Contrast between Economics and Psychology](#). Chicago: University of Chicago Press.
- [Kahneman, Daniel; Tversky, Amos](#) (1979). "Prospect Theory: An Analysis of Decision under Risk". *Econometrica*.

TEACHING LEARNING STRATEGIES

- Flipped classroom
- Active learning
- Digital learning
- Group/Team work

MODE OF TRANSACTION

- Hybrid

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

Sample Questions to test Outcomes.

1. Explain the nature of utility function
2. State the important features of Stackelberg equilibrium
3. Write a note on VES Production function Derive the ordinary demand function and state the important properties
4. State the important features of CES production function
5. Derive Cost as a function of output.
6. Explain the concept bounded rationality

Mapping of COs with POs & PSOs

Course Outcomes	Programme Outcomes				Programme Specific Outcomes			
	PO 1	PO 2	PO 6	PO 7	PSO 1	PSO 2	PSO 4	PSO 5
CO 1	S	S	M	M	S	S	S	S
CO 2	S	S	M	M	S	S	S	S
CO 3	S	S	S	S	S	S	S	S
CO 4	S	S	M	M	S	S	S	S

*S-Strong correlation, M-Moderate correlation; W- Weak correlation, N – No correlation

INTERNATIONAL ECONOMICS

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

Course Objectives

1. Explain the traditional and modern theories of trade
2. Evaluate the various policies and instruments of trade policies and its implications
3. Understanding of the various institutions governing trade and capital flows
4. Analyse the components of Balance of Payments accounts
5. Understanding of the contemporary global economic issues

SEMESTER II

DISCIPLINE SPECIFIC CORE COURSE

COURSE CODE – MAECO02DSC07

CREDIT- 4

Course Code: International Economics

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
3	1	4	45	30	75	60	40	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE =End Semester Evaluation

PROGRAMME OUTCOMES (PSO) relevant to this course

PO (1), PO (2), PO (3), PO (6) PO (7)

PROGRAMME SEPCIFIC OUTCOMES (PSO) relevant to this course

PSO (1) Knowledge of the basis of international trade and capital flows

PSO (2) Ability to examine and measure India's integration with the global economy

COURSE OUTCOMES

Course Learning Outcomes:

C01	Explain the traditional and modern theories of trade
C02	Evaluate the various trade policies, its instruments and implications
C03	Analyse the Balance of Payments of India to explain the empirical dimensions of international trade and capital flows
C04	Justify the role and functions of exchange rate markets in a world of perfect capital mobility and its implications for monetary policy
C05	Evaluate the issues of the contemporary global economy

*Course outcomes based on revised blooms taxonomy

COURSE CONTENTS

Module 1

(15 hours)

- 1.1 Traditional theories of trade - Basis and gains from trade - Offer curves - Terms of trade
- 1.2 Factors - Endowments –HO theory - Commodity prices - factor price equalisation - Specific factors - Factor intensity reversal - The Leontief Paradox
- 1.3 Modern theories of Trade - Monopolistic competition - Intra industry trade Technological difference -Transportation costs -Environmental standards -Industry location
- 1.4 International trade and growth of factors of production - Immiserising growth, technical progress, trade and welfare.

Suggested readings specific to the module.

- 1.1 *Dominic Salvatore. 2013. International Economics. John Wiley& Sons, New York.*
- 1.2 *Paul. R. Krugman, Maurice Obstfeld& Marc Melitz. 2015. International Economics. Pearson.*
- 1.3 *Robert C Feenstra& Alan M Taylor. 2008. International Economics. 2nd Edition, Worth Publishers, New York.*
- 1.4 *B O Sodersten and Geoffrey Reed. 2003. International Economics. London:Macmillan.*

Module 2

(15 hours)

2.1 Instruments of Trade policy –Trade restrictions - Analysis of tariffs - Quotas and other non-tariff barriers - Protectionism –Impacts in commodity and factor markets

2.2 Free trade –Customs union - Types, effects and benefits - Trade integration and free trade areas – Case of European Union - Trade and development - Free Trade and developing economies.

2.3 Evolution of free trade policies – GATT and negotiations - WTO and the current state of free trade

2.4 Measuring trade – Analysis of Balance of Payments – Delineating India’s BoP statistics

Suggested readings specific to the module.

2.1 Robert C Feenstra & Alan M Taylor. 2008. *International Economics*. 2nd Edition, Worth Publishers, New York.

2.2 Paul. R. Krugman, Maurice Obstfeld & Marc Melitz. 2015. *International Economics*. Pearson.

2.3 Dominic Salvatore. 2013. *International Economics*. John Wiley & Sons, New York.

2.4 Sunanda Sen. 2010. *International Trade Theory and Policy: A Review of the Literature*. Levy Economics Institute of Bard College Working Paper No 635. URL: http://www.levyinstitute.org/pubs/wp_635.pdf

Module 3

(15 hours)

3.1 Equilibrium and Disequilibrium in BOP - Traditional Versus Modern theories

3.2 Exchange rates - Exchange rate markets - Exchange rate determination

3.3 Evolution of the international monetary system - Gold standards - Bretton Woods –From fixed to flexible exchange rate regime

3.4 Capital flows – Perfect capital mobility Versus Imperfect capital mobility under fixed and flexible exchange rates – Implications for output, prices and interest rates

Suggested readings specific to the module.

3.1 Paul. R. Krugman, Maurice Obstfeld & Marc Melitz. 2015. *International Economics*. Pearson.

3.2 Dominic Salvatore. 2013. *International Economics*. John Wiley & Sons, New York.

3.3 Ingram, J.C. and Dunn, R.M. (1993) *International Economics*, 3rd ed., John Wiley & Sons: New York NY, pp. 403-438, 449-467.

3.4 Richard T. Froyen. *Macroeconomics: Theories and Policies*, 10th Edition. Pearson

Module 4

(15 hours)

4.1 Capital and labour flows in the contemporary global economy – Implications – Forex reserves - Rising BoP crises

4.2 Financial globalization – global financial crises – Reasons and Implications

4.3 Capital flows, flexible exchange rates and policy goals in an Open economy

4.4 Contemporary issues in the international economy

Suggested readings specific to the module.

4.1 Paul. R. Krugman, Maurice Obstfeld & Marc Melitz. 2015. *International Economics*. Pearson.

4.2 Yarbrough, B.V. and Yarbrough, R.M. (2006) *The World Economy: Trade and Finance*, 7th ed., Thomson South-Western: Mason OH

4.3 Rudiger Dornbusch and Stanley Fischer and Richard Startz: *Macroeconomics*, 13th Edition, 2018

4.4 Robert M Dunn & John H Mutti. 2004. *International Economics*. Routledge

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

Dominic Salvatore. 2013. International Economics. John Wiley & Sons, New York.

Paul. R. Krugman, Maurice Obstfeld & Marc Melitz. 2015. International Economics. Pearson.

Robert C Feenstra & Alan M Taylor. 2008. International Economics. 2nd Edition, Worth Publishers, New York.

Rudiger Dornbusch and Stanley Fischer and Richard Startz: *Macroeconomics*, 13th Edition, 2018

<https://mru.org/teacher-resources/courses/international-trade>

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

Martin Uribe & Stephanie Schmitt-Grohé. 2014. *Open Economy Macroeconomics*. URL: <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.644.1492&rep=rep1&type=pdf>

Federich S Mishkin. 2014. *The Economics of Money Banking and Financial Markets*. 11th Edition, Pearsons.

Robert M Dunn & John H Mutti. 2004. *International Economics*. Routledge

TEACHING LEARNING STRATEGIES

- **Flipped classroom**
- **Active learning**

- Digital learning
- Group/Team work

MODE OF TRANSACTION

- Hybrid

ASSESSMENT RUBRICS

Marks

End Semester Evaluation	60
Continuous Evaluation	40
Seminar	16
Exams (2)	16
Assignment	8

Sample Questions to test Outcomes.

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

Mapping of Course Outcomes to PSOs/POs

	PSO1	PSO2	PO1	PO2	PO3	PO6	P07
CO1	3	1	2	2	3	3	3
CO2	2	2	2	2	3	3	3
CO3	1	3	3	3	3	3	3
CO4	2	1	2	2	3	3	3
CO5	1	3	2	2	3	3	3

ENVIRONMENTAL ECONOMICS

Course Description

Course Objectives

The course is divided into four modules which cover introducing environmental economics and environmental impacts of development, sustainable development, and economics of natural resources, environmental protection and policy.

1. To provide the student better perception about environment and its significance in the development process through environment economy interlinkage mechanism.
2. Familiarise the students with concepts, tools and policy instruments used in economics to address the environmental concerns.
3. To study how the environmental impacts of development project can be reduced through the practices of sustainable development.
4. To study the various instruments for environmental protection programme that can augment environmental quality at the local, national and international level.
5. To examine the role of various state and non-state agencies in environmental protection leading to quality environment.
6. To provide the students with a basic skills and knowledge in the natural resource management of a country.
7. To study the methods and techniques of valuation of environmental cost and benefit of developmental programme.

SEMESTER III

DISCIPLINE SPECIFIC CORE COURSE

Course Code: MAECO03DSC08

CREDIT - 4

Course Name: ENVIRONMENTAL ECONOMICS

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
3	1	4	45	30	75	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

CO1	Attain deeper understanding of economy and environment linkages and also about the major environmental impacts of development.
CO2	Learn in depth about Economics of externality of environmental goods.
CO3	Gain better knowledge about environmental impacts of development and best

	practices of sustainable development
CO4	Gain a deeper understating about the economics of natural resource management in reducing the intensity environmental problems.
CO5	Gain command over the environmental valuation techniques pertains to cost and benefit of a developmental project.
CO6	To gain better understanding of various environmental protection instruments that can be used for ensuring quality parameters in environment.
CO7	To gain a better perception and knowledge about the role of government, NGO's and other agencies in environmental protection programme.

COURSE CONTENTS

Module 1

Introducing environmental economics and environmental impacts of development:

- 1.1 The Economy and environment
- 1.2 Inter linkages between the economy and environment
- 1.3 Environmental problems-pollution of air, water and land
- 1.4 Environmental problem as an economic problem

Suggested readings

- Tom, Tietan Berg. 2004. *Environmental and Natural resource Economics*. Pearson.
- Prakash, Vohra, and Ragesh, Mehta. 2007. *Environmental Economics*. New Delhi: Common wealth publishers.
- Charles, D Kolstad. 2000. *Environmental Economics*. Oxford University Press.
- Nick, Hanley, Jason, F Shogren and Ben, White. 2002. *Environmental Economics in Theory and Practice*. Newyork: Palgrave
- Eban, S Goodstein. 2002. *Economics and the environment*. John wiley and sons.
- Misra, SP, and Pandya, S N. 2009. *Essential Environmental Studies*. Ane Book Pvt.Ltd
- K G Mailer and J Vincent: Handbook of Environmental Economics, Elsevier (2005)

Externality

- 1.1 Market failure and environmental goods
- 1.2 Approaches and causes of market failure
- 1.3 Market failure and externality
- 1.4 Attributes of externality
- 1.5 Internalising externalities

Module 2

Sustainable development:

- 2.1 Defining sustainable development
- 2.2 Different approaches to sustainability—Hart wick, Solow, safe minimum Standard-Daly's operational principle

Suggested readings

- Manusinghe Mohan (2009) Sustainable Development in practice, Cambridge University Press, Cambridge
- Subashini, Muthukrishnan. 2015. *Environmental Economics*, PHI learning Pvt.Ltd.
- Tom, Tietan Berg. 2004. *Environmental and Natural resource Economics*. Pearson.
- Prakash, Vohra, and Ragesh, Mehta. 2007. *Environmental Economics*. New Delhi: Common wealth publishers.
- Nick, Hanley, Jason, F Shogren and Ben, White. 2002. *Environmental Economics in Theory and Practice*. Newyork: Palgrave
- Misra, SP, and Pandey, S N. 2009. *Essential Environmental Studies*. Ane Book Pvt.Ltd
- Russel, S, Clifford. 2001. *Applying Economics to environment*. Oxford University Press.
- Charles, D Kolstad. 2000. *Environmental Economics*. Oxford University Press.
- K G Mailer and J Vincent: Handbook of Environmental Economics, Elsevier (2005)

2.1 Measurement of sustainability

2.2 Environmental accounting

Module 3

Economics of Natural Resources:

3. 1 Resource taxonomy
3. 2 managing renewable and non-renewable resources
3. 3 Water resources in India-issues and concerns
3. 4 water ethics
3. 5 Biodiversity-magnitude and levels
3. 6 value of bio diversity and threats to biodiversity

Suggested readings

- Tom, Tietan Berg. 2004. *Environmental and Natural resource Economics*. Pearson.
- Aravindkumar. 2004. *Environment and Health*. New Delhi: APH Publishing Company.
- Prakash, Vohra, and Ragesh, Mehta. 2007. *Environmental Economics*. New Delhi: Common wealth publishers.
- Misra, SP, and Pandey, S N. 2009. *Essential Environmental Studies*. Ane Book Pvt.Ltd
- Saxeena, H M. 2006. *Environmental Studies*. Rawat Publications.
- Eban, S Goodstein. 2002. *Economics and the environment*. John wiley and sons.
- Nick, Hanley, Jason, F Shogren and Ben, White. 2002. *Environmental Economics in Theory and Practice*, Newyork: Palgrave
- Subashini, Muthukrishnan. 2015. *Environmental Economics*, PHI learning Pvt.Ltd. *ctice*.
- K G Mailer and J Vincent: Handbook of Environmental Economics, Elsevier (2005)

3.1 Environment Impact Assessment (EIA)

3.2 Environmental Planning and Management

3.3 Cost benefit analysis and environment

3.4 Need for CBA and valuation

3.5 Market based valuation, use of surrogate market, use of standard preference method

3.6 Limitation of environmental valuation

Module 4

Environmental protection and policy:

- 4.1 Instruments for environmental protection
- 4.2 Command and control
- 4.3 Market based new tools-education, information and voluntary measures
- 4.4 Direct economic instruments-pollution fee and polluter pay principle, deposit refund system, taxes and subsidies

Suggested readings

- Tom, Tietan Berg. 2004. *Environmental and Natural resource Economics*. Pearson.
- Aravindkumar. 2004. *Environment and Health*. New Delhi: APH Publishing Company.
- Prakash, Vohra, and Ragesh, Mehta. 2007. *Environmental Economics*. New Delhi: Common wealth publishers.
- Misra, SP, and Pandey, S N. 2009. *Essential Environmental Studies*. Ane Book Pvt.Ltd
- Saxena, H M. 2006. *Environmental Studies*. Rawat Publications.
- Eban, S Goodstein. 2002. *Economics and the environment*. John Wiley and sons.
- Nick, Hanley, Jason, F Shogren and Ben, White. 2002. *Environmental Economics in Theory and Practice*, New York: Palgrave.
- 4.1 Climate change, carbon tax and carbon emission trading
- 4.2 Role of various sectors in environmental Protection-Government, public, private, cooperative, NGO's etc.

Core Compulsory Readings

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

Core Suggested Readings

- Barbier, Edward B. □1998 *The Economics of Environment and Development*. Selected Essays, Edward Elgar, Cheltenham
- Tom, Tietenberg. □2011 *Environmental and Natural Resource Economics*. New York: HarperCollins Publishers.

- Ian, Goldin, and L, □1995 Alan Winters. *The Economics of Sustainable Development*, New York: Cambridge University Press.
- Sterner, and Coria. □ 2011. *Policy Instruments for Environmental and Resource Management*. Francis and Taylor.
- David, Pearce, and Dominic, □1994. Moran. *The Economic Value of Biodiversity*, London: Earth Scan Publications Ltd.
- Subashini, Muthukrishanan. 2015. *Environmental Economics*, PHI learning Pvt.Ltd.
- K G Mailer and J Vincent: *Handbook of Environmental Economics*, Elsevier (2005)
- Phaneuf and Requate: 2017. *A Course in Environmental Economics: Theory, Policy and Practice*, Cambridge University Press
- Freeman, Herriges and Kling: 2014. *The Measurement of Environmental and Resource Values: Theory and Methods*, 3rd ed. RFF Press/Routledge

TEACHING LEARNING STRATEGIES

- Lecture method
- Discussion/ Debate
- MOODLE
- ICT

MODE OF TRANSACTION

- Offline (face-to-face mode)/ online

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

Sample Questions to test Outcomes.

1. Analyse the economy environment interlinkage mechanism with the aid of material balance model
2. All environmental problems will ultimately have landed as an economic problem. Substantiate the statement
3. What is externality? How externality act as a hurdle in environmental resource usage?
4. Examine the economics of natural resource management in the case of renewable and non-renewable resources.
5. Portray the best practices for sustainable development
6. How the biodiversity loss adversely affects the economy and development?
7. Discuss about the important environmental protection instruments adopted for protecting the quality of environment in the country

Mapping of COs with POs & PSOs

Course Outcomes	Programme Outcomes					Programme Specific Outcomes				
	PO 1	PO 2	PO 3	PO 4	PO 5	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO 1	N	M	S	N	M	M	S	W	M	M
CO 2	M	M	S	S	M	S	S	S	S	M
CO 3	M	M	S	S	M	S	S	S	S	M
CO 4	S	S	S	S	S	S	S	M	S	S
CO 5	N	M	S	N	M	M	S	W	M	M
CO 6	M	M	S	S	M	S	S	S	S	M
CO 7	M	M	S	S	M	S	S	S	S	M

*S-Strong correlation, M-Moderate correlation; W- Weak correlation, N – No correlation

POLITICAL ECONOMY

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

Course Objectives

1. Examine the genesis of the subject matter of modern economics and its methodology
2. Knowledge of the theories of value and distribution, and the role of state and markets and analyse the methodological differences of the various schools of economic thought
3. Critical overview of the capitalist economy by examining its various crises and its survival.
4. Explore the rise of financial capital and inequality on the global scale

PROGRAMME OUTCOMES (PSO) relevant to this course

PO (1),PO (3), PO (5), PO (6), PO (7)

PROGRAMME SEPCIFIC OUTCOMES (PSO) relevant to this course

PSO (1) Knowledge of the evolution of economics as a subject and its methodologies

PSO (2) Critically evaluate the various economic systems by highlighting its linkage with the subject

SEMESTER III

DISCIPLINE SPECIFIC CORE COURSE

Course Code: MAECO03DSC09

CREDIT-4

Course Code: POLITICAL ECONOMY

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
3	1	4	45	30	75	60	40	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE =End Semester Evaluation

COURSE OUTCOMES

Course Learning Outcomes:

C01	Explain how history, sociology and politics influence economics outcomes
C02	Evaluate the theories of value and distribution and its importance in economic thought
C03	Critically examine the various economic systems, especially the capitalist crises and its survival
C04	Evaluate the major tenets of the neoclassical thought, its preschools- and the rise of neoliberalism
C05	Analyse the rise of financial capitalism and global inequality

*Course outcomes based on revised blooms taxonomy

COURSE CONTENTS

Module 1

(15 hours)

1.1 Introduction to Political Economy – How Politics and Economics are related?

1.2Pre Classical thought and Classical Political Economy

1.3 Value theory and distribution

1.4Marxian Political Economy and Economic systems

Suggested readings specific to the module.

1.1 'Schools of thought' available in <https://www.hetwebsite.net/het/thought.htm>

1.2 Martin Fogarty & Senior Sophister. 'A History of Value Theory'. Available in https://www.tcd.ie/Economics/assets/pdf/SER/1996/Martin_Fogarty.html

1.3 Ben Fine & Dimitris Milonakis. 2009. 'From Political Economy to Economics.' Chapters 1-4

1.4 James A Caporaso & David P Levine. 1992. Theories of Political Economy. Introduction & Chapter 1-2

Module 2

(15 hours)

2.1 German historical School, Marginalist Revolution and *Methodenstriet*

2.2 Economic History, Old institutional Economists & Social Economics

2.3 Methodological individualism & the Austrian School

2.4 Keynesian Political Economy

Suggested readings specific to the module.

2.1 Ben Fine & Dimitris Milonakis. 2009. 'From Political Economy to Economics.' Chapters 3-14.

2.2 James A Caporaso & David P Levine. 1992. Theories of Political Economy. Chapter 3-5

Module 3

(15 hours)

3.1 Neoclassicals and the formalist revolution

3.2 Economics imperialism & The New Institutional Economics

3.3 Economic Approach to Politics – Political Economy of Power, State and Justice

3.4 Rise of Neoliberalism

Suggested readings specific to the module.

3.1 Ben Fine & Dimitris Milonakis. 2009. 'From Political Economy to Economics.' Chapter 15

3.2 James A Caporaso & David P Levine. 1992. Theories of Political Economy. Chapter 6-9

3.3 Robert L Heilbroner. 1999. The worldly philosophers: The lives, times, and ideas of the great economic thinkers. URL: http://starbooksfeaa.weebly.com/uploads/5/4/8/6/54869709/the_wordly_philosophers.pdf

3.4 David Harvey. 2005. A Brief History of Neoliberalism.

Module 4

(15 hours)

- 4.1 Crises of Capitalism and its survival
- 4.2 Human Psychology, Animal Spirits, Accumulation and Global Capitalism
- 4.3 Rise of Finance capital and Financialisation
- 4.4 Rising Inequality and Capital in the Twenty-First Century

Suggested readings specific to the module.

4.1 Immanuel Wallerstein. 1974. The Rise and Future Demise of the World Capitalist System: Concepts for Comparative Analysis. URL: <http://bev.berkeley.edu/ipe/readings/Wallerstein.pdf>

4.2 George Akerlof., and Robert J. Shiller. 2009. Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism.

4.3 Rudolf Hilferding. 1910. Finance Capital. URL: <https://www.marxists.org/archive/hilferding/1910/finkap/>

4.4 Piketty, T., & Goldhammer, A. (2014). Capital in the Twenty-First Century. Harvard University Press.

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

- Ben Fine & Dimitris Milonakis. 2009. 'From Political Economy to Economics.'
- James A Caporaso & David P Levine. 1992. Theories of Political Economy.
- Robert L Heilbroner. 1999. The worldly philosophers: The lives, times, and ideas of the great economic thinkers. URL: http://starbooksfeaa.weebly.com/uploads/5/4/8/6/54869709/the_wordly_philosophers.pdf
- Hunt, E. K., & Lautzenheiser, M. 2011. History of economic thought: A critical perspective. 3rd ed. & Teachings from the Worldly Philosophy (55-157).
- Maurice Dobb. 2010. Theories of Value and Distribution Since Adam Smith: Ideology and Economic Theory. Chapter 6.
- Michael Heinrich. 2004. An Introduction to the Three Volumes of Marx's Capital. URL: <http://digamo.free.fr/heinrich.pdf>
- R Luxemburg. 1913. The Accumulation of Capital. Available at <https://www.marxists.org/archive/luxemburg/1913/accumulation-capital/accumulation.pdf>
- Immanuel Wallerstein. 1974. The Rise and Future Demise of the World Capitalist System: Concepts for Comparative Analysis. URL: <http://bev.berkeley.edu/ipe/readings/Wallerstein.pdf>
- Keith Tribe. 1981. Genologies of Capitalism. The Macmillan Press.
- Milton Friedman. 1962. Capitalism and Freedom pp. 1–55, 108–37, and 161–90.
- David Harvey. 2005. A Brief History of Neoliberalism.

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

- ‘Theories of Value’ Available in <https://www.marxists.org/reference/subject/philosophy/help/value.htm>
- Amit Bhaduri. On the border of economic theory and history.
- Allen Drazen. 2009. Chapter 1 in ‘Political Economy of Macroeconomics’. URL: <https://www.jstor.org/stable/j.ctv346rwp&https://assets.press.princeton.edu/chapters/s6819.pdf>
- Rodd Hill & Tony Myatt. 2010. The Economics Anti-textbook: A critical thinker’s guide to Microeconomics. URL: <http://digamo.free.fr/antitext.pdf>
- Immanuel Wallerstein. 1974. The Rise and Future Demise of the World Capitalist System: Concepts for Comparative Analysis. URL: <http://bev.berkeley.edu/ipe/readings/Wallerstein.pdf>
- Giovanni Arrighi. 2010. The Long Twentieth Century: Money, Power, and the Origins of Our Times.
- Joseph Schumpeter. 1942. Capitalism, Socialism and Democracy.
- Frederich Hayek. 1944. Road to Serfdom. URL: <https://mises.org/library/road-serfdom-0>
- Boltanski, Luc, and Eve Chiapello. 1999. The New Spirit of Capitalism. Verso.
- Paul Baran and Paul Sweezy. 1966. Monopoly Capital. Monthly Review Press
- Samir Amin. 1970. Accumulation on a world scale

TEACHING LEARNING STRATEGIES

- Flipped classroom
- Active learning
- Digital learning
- Group/Team work

MODE OF TRANSACTION

- Hybrid

ASSESSMENT RUBRICS

Marks

End Semester Evaluation	60
Continuous Evaluation	40
• Seminar	16

• Exams (2)	16
• Assignment	8

Sample Questions to test Outcomes.

- 1.Examine the three main conceptions used by the term ‘politics’ and ‘economics’
- 2.Evaluate the major differences between inductive and deductive methods
- 3.Evaluate Marx’s view on the functioning of capitalist economy
- 4.Analyse the importance of labour theory through the ideas of Smith, Ricardo and Marx
- 5.Examine the major tenets of Neoclassical economics
- 6.Analyse the rise of inequality in the contemporary world economy

Mapping of Course Outcomes to PSOs/POs

	PSO1	PSO2	PO1	PO3	PO5	PO6	PO7
CO1	3	1	2	3	2	3	3
CO2	3	1	2	3	2	3	3
CO3	2	3	3	3	3	3	3
CO4	3	1	2	3	2	3	3
CO5	2	2	2	3	2	3	3

ECONOMETRICS

Course Description

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

PROGRAMME OUTCOMES (PO) relevant to this course
PO1, PO2, PO6, PO7

PROGRAMME SPECIFIC OUTCOMES (PSO) relevant to this course

PSO (1) Knowledge of the various econometric tools for economic data analysis

PSO (2) Knowledge of the basis computational skills for estimating, testing and forecasting data

PSO (3) analyzing various economic research problems with the help of econometrics

PSO (4) frame and estimate single equation and system models, lagged models, dummy variable models and time series and panel data models

PSO (5) Attain competitive edge in mastering econometric methods

**SEMESTER III
DISCIPLINE SPECIFIC CORE COURSE
COURSE CODE – MAECO03DSC10**

CREDIT-4

Course Name: ECONOMETRICS

Credit			Teaching Hours			Assessment	
L/T	P/I	Total	L/T	P/I	Total	CE	ESE
1	3	4	15	90	105	40	60

Lecture/Tutorials, P/I=Practical, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

C01	Understand various concepts and methodology related to econometric analysis
C02	Understand basics of single equation and system models, lagged models, dummy variable models and time series and panel data models
C03	Evaluate data and apply suitable econometric techniques
C04	Creating and testing statistical hypothesis with various econometric tests
C05	Analyse, forecast and predict secondary data using econometric tools

*Course outcomes based on revised blooms taxonomy

COURSE CONTENTS

Module 1

(30 hours)

Econometrics- Basic Concepts

1.1 Definition and scope of Econometrics - methodology of econometrics

1.2 two variable regression analysis- estimation and testing

1.3 econometric problems- autocorrelation, multicollinearity and hetroscedasticity – reasons, tests consequences and remedies

Suggested readings specific to the module.

1.1 Klien L.R..1962 *Introduction to Econometrics*. New Jersey: Prentice Hall Inc. Englewood Cliffs.

1.2 Damodar N. Gujarati.1992. *Essentials of Econometrics*. McGraw Hill.

1.3 Damodar N. Gujarati.2000. *Econometrics*.

Module 2

(15 hours)

Dummy Variable and Lagged Variable Models:

2.1 Dummy variables- Use of dummy variables

- 2.2 Regression on dummy variables dummy variable trap
- 2.3 Dummy dependent variable models- LPM, Logit, Probit, Tobit Models
- 2.4 Lagged variables - Regression with Lagged Variables
- 2.5 Distributed Lag Models– auto regressive model- Estimation of lag models

Suggested readings specific to the module.

- 2.1 Damodar N. Gujarati 1995. *Basic Econometrics*. McGraw Hill.
- 2.2 Michael D. Intriligator. 1980. *Econometric Models, Techniques and Applications*, New Delhi: Prentice Hall of India.
- 2.3 A. Koutsoyiannis. 2004. *Theory of Econometrics*. Palgrave.
- 2.4 Greene, W. 2008. *Econometrics Analysis*. Pearson.

Module 3

(30 hours)

Simultaneous equation model and Estimation:

- 3.1 Simultaneous equation model – nature – simultaneous equation bias
- 3.2 structural and reduced form model
- 3.3 Identification problem
- 3.4 Indirect least squares -two stage least square -three stage least square

Suggested readings specific to the module.

- 3.1 A. Koutsoyiannis. 2004. *Theory of Econometrics*. Palgrave.
- 3.2 Greene, W. 2008. *Econometrics Analysis*. Pearson.
- 3.3 Johnston, J. and John Di Nardo, 1997. *Econometric Methods*. 4th Edition, London: McGraw-Hill Companies Inc

Module 4

(30 hours)

Time Series Models:

- 4.1 Time Series Analysis
- 4.2 Stationarity
- 4.3 Limitations of time series analysis
- 4.4 Unit roots and Units roots tests
- 4.5 ARIMA modelling

Suggested readings specific to the module.

- 4.1 Desai, Meghand. 1976. *Applied Econometrics*. New York: McGraw Hill Book Co.
- 4.2 Baltagi, B. H. 2008. *Econometric Analysis of Panel Data*. 4th edition, John Wiley.
- 4.3 Enders, Walter .2009. *Applied Econometric Time Series*. 3rd Edition, Wiley
- 4.5 Everitt, Brian S and Dunn, Graham. 2001. *Applied Multivariate Data Analysis*. Second Edition. Arnold.

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

- Johnston, J. and John Di Nardo, 1997. *Econometric Methods*. 4th Edition, London: McGraw-Hill Companies Inc.
- Raw and Miller. R.L., 1959. *Applied Econometrics*, PHI, Delhi

- Michael D. Intriligator.1980. *Econometric Models, Techniques and Applications*, New Delhi: Prentice Hall of India
- Johnston. J. 1972. *Econometric Methods*. New York: McGraw Hill Book Company.
- Klien L.R. A. 1974.*Text Book of Econometrics*. New Jersey: Prentice Hall Inc. Englewood Cliffs.
- Maddalla G.S.1977. *Econometrics*. New York: McGraw Hill.

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

- G. M. K Madnani.2015. *Introduction to Econometrics: Principles and Applications*. CBS publishers & distributors.8th edition
- Wooldridge, Jeffrey M. 2003. *Introductory Econometrics: A Modern Approach*, Second Edition. USA: Thomson South Western.
- Pindyck, Robert S. and Daniel L. Rubinfeld .1995.*Econometric Models and Economic Forecasts*. 4th Edition New York: Irwin McGraw-Hill.
- Ramanathan, Ramu .2000. *Introductory Econometrics with Applications*.5th Edition.New Delhi: Cengage Learning India Pvt. Ltd.
- Thomas, R.L .1993. *Introductory Econometrics: Theory and Applications*. London: Longman.
- Patterson, Kerry .2001. *An Introduction to Applied Econometrics – A Time Series Approach*. London: MacMillan Press Ltd.

TEACHING LEARNING STRATEGIES

- Flipped classroom
- Active learning
- Digital learning
- Group/Team work

MODE OF TRANSACTION

Hybrid

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

Sample Questions to test Outcomes.

1. Briefly explain the features of stochastic term
2. Discuss the methods of detecting Auto correlation
3. Explain ILS method with the help of Keynesian model, $C = \alpha + \beta Y + U$ and $Y = C + I$
4. Briefly discuss about the use of dummy variables in econometrics

5. Estimate the capital adjustment model, Stock of capital(Z)=f(Income, Y)

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

Mapping of COs with POs & PSOs

Course Outcomes	Programme Outcomes				Programme Specific Outcomes			
	PO 1	PO 2	PO 6	PO 7	PSO 1	PSO 2	PSO 4	PSO 5
CO 1	S	S	M	S	S	S	S	S
CO 2	S	S	M	S	S	S	S	S
CO 3	S	S	M	S	S	S	S	S
CO 4	S	S	M	S	S	S	S	S
CO 5	S	S	M	S	S	S	S	S

*S-Strong correlation, M-Moderate correlation; W- Weak correlation, N – No correlation

FINANCIAL INSTITUTIONS AND MARKETS

Course Description

Course Objectives

The course is divided into four modules which cover financial system-structure, nature and role of financial system, financial market, Non-Banking Financial Intermediaries and global financial markets.

- The course provides an overview of financial system, structure and its role.
- The course imparts conceptual idea on financial development, relation between financial system and economic development.
- The course equips the students to know better understanding about functions, components and developments of financial markets.
- The course also aims to provide better picture about financial sector reforms, structure and growth of non-banking financial institutions, innovations and developments of financial services and instruments and knowledge on global financial markets.

SEMESTER IV DISCIPLINE SPECIFIC CORE COURSE Course Code: MAECO04DSC12

Course Name: FINANCIAL INSTITUTIONS AND MARKETS

Credit	Teaching Hours	Assessment
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L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
3	1	4	45	30	75	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

CO1	Gain an in-depth understanding about the financial system and its role in economic development.
CO2	The students acquire a comprehensive knowledge about the role financial market in investment decisions in stock market and create an ability to make security analysis and promote them to make better investment decision for the development of the economy.
CO3	Helps to attain a comprehensive knowledge about the role of financial market in economic development and helps to understand about the factors and determinants of investment decisions in stock markets.
CO4	Helps to learn more about various instruments of financial services.
CO5	Gain a better knowledge about global financial markets and new innovative developments in financial system.

COURSE CONTENTS

Module 1

- 1.1 Financial system-structure, nature and role of financial system
1. 2 Classification of financial institutions
1. 3 Financial system and Economic development
1. 4 Indicators of financial development
1. 5 Criteria to evaluate a financial system

Suggested readings

- L.M. Bhole. 2007.Financial institutions and Markets. New Delhi: McGraw Hill company.
- L M Bhole and Jitendra Mahakud. 2017. Financial institutions and Markets. New Delhi: McGraw Hill Education Private Ltd.
- M.Y Ghan. 2008. Indian Financial system. New Delhi: McGraw Hill company.
- Meir Kohn. 2007. Financial institutions and Markets. UK: Tata Mc GRaw Hill.
- S Guruswamy. 2009. Financial Institutions and markets. UK: Tata McGraw Hill.
- Rajesh Chakravarty. 2009. The financial sector in India. Oxford.
- Pallale V Bharati. 2012. Indian Financial system. New Delhi: Pearson.
- Meir Kohn. 2017. Financial Institutions and Market. New York: Oxford University Press.

- Niti Bhasin. 2017. 70 years of Banking system in India. New Century publication.
- Trends and Progress of Banking India, RBI various issues

1. 1 Concepts of financial development

1. 2 Financial innovation

1. 3 Financial engineering

1. 4 Financial revolutions

1. 5 Diversifications-disintermediation-financial repression- prudential regulation internationalization and globalization-securitization

Module 2

2.1 Financial market-meaning-classifications

2.2 Money market-objectives-functions-importance

2.3 Components-call money market-treasury bill market-commercial bill market-certificate of deposit Market- bond market, stock market, derivatives market- Acceptance Market-collateral loan Market

2.4 Capital market- objectives-functions-importance-structure-primary and secondary market

Suggested readings

- L.M. Bhole. 2007. Financial institutions and Markets. New Delhi: McGraw Hill company.
- L M Bhole and Jitendra Mahakud. 2017. Financial institutions and Markets. New Delhi: McGraw Hill Education Private Ltd.
- Bhasin Niti (2020) Money and Financial Markets, New Delhi: New Century publications
- M.Y Ghan. 2008. Indian Financial system. New Delhi: McGraw Hill company.
- Meir Kohn. 2007. Financial institutions and Markets. UK: Tata Mc GRaw Hill.
- S Guruswamy. 2009. Financial Institutions and markets. UK: Tata McGraw Hill.
- Meir Kohn. 2017. Financial Institutions and Market. New York: Oxford University Press.

2.1 Stock exchanges-meaning and functions

2.2 Stock exchanges in India

2.3 SEBI

2.4 Financial sector reforms

Module 3

3.1 Non-Banking Financial Intermediaries

3.2 Insurance companies

3.3 Miscellaneous NBFIs –structure and growth-role and functions

3.4 Hire purchase-lease finance-Housing Finance

Suggested readings

- L.M. Bhole. 2007. Financial institutions and Markets. New Delhi: McGraw Hill company.
- Jaspal Singh(2006) Mutual funds: Growth ,performance and prospects, New Delhi: Deep and Deep Publications
- L M Bhole and Jitendra Mahakud. 2017. Financial institutions and Markets. New Delhi: McGraw Hill Education Private Ltd.
- M.Y Ghan. 2008. Indian Financial system. New Delhi: McGraw Hill company.
- Hazel J Johnson. 2000. Global financial institutions and Markets. UK: Mc Graw Hill company.

3.1 Merchant Banking

3.2 Venture capital- mutual funds –credit rating agencies

3.3 Debt securitization –disinvestment-insider rating-corporate restructuring

Module 4

4. 1 Global Financial market

4. 2 Global innovative instruments

4. 3 Global foreign exchange market

4. 4 Global banking-offshore banking -global equity market

4. 5 Major global financial market

4. 6 New generation banks

Suggested readings

- Bhasin Niti (2020) Money and Financial Markets, New Delhi: New Century publications
- Meir Kohn. 2007. Financial institutions and Markets. UK: Tata Mc GRaw Hill.
- S Guruswamy. 2009. Financial Institutions and markets. UK: Tata McGraw Hill.
- Rajesh Chakravarty. 2009. The financial sector in India. Oxford.
- Pallale V Bharati. 2012. Indian Financial system. New Delhi: Pearson.
- Meir Kohn. 2017. Financial Institutions and Market. New York: Oxford University.

- Siddaih Thumnulari. 2016. Financial services. Pearson.

4.1 Digital technology in banking sector

4.2 Benefits of card and non -card based electronic payment system

4.3 Internet Banking

4.4 Mobile banking

4.5 Digitization of financial services-RTGS-NEFT-CFMS-CTS-MICR- speed Clearance-E wallet

4.6 Plastic money- its merits and demerits

Core Compulsory Readings

- L.M. Bhole. 2007. Financial institutions and Markets. New Delhi: McGraw Hill company.
- L M Bhole and Jitendra Mahakud. 2017. Financial institutions and Markets. New Delhi: McGraw Hill Education Private Ltd.
- M.Y Ghan. 2008. Indian Financial system. New Delhi: McGraw Hill company.
- Meir Kohn. 2007. Financial institutions and Markets. UK: Tata McGraw Hill.
- S Guruswamy. 2009. Financial Institutions and markets. UK: Tata McGraw Hill.
- Rajesh Chakravarty. 2009. The financial sector in India. Oxford.
- Pallale V Bharati. 2012. Indian Financial system. New Delhi: Pearson.
- Meir Kohn. 2017. Financial Institutions and Market. NewYork: Oxford University Press.
- Niti Bhasin. 2017. 70 years of Banking system in India. New Century publication.
- Trends and Progress of Banking India, RBI various issues
- Bhasin Niti (2020) Money and Financial Markets, New Delhi: New Century publications
- Jaspal Singh(2006) Mutual funds: Growth ,performance and prospects, New Delhi: Deep and Deep Publications
- Hazel J Johnson. 2000. Global financial institutions and Markets. UK: Mc Graw Hill company.
- Siddaih Thumnulari. 2016. Financial services. Pearson.

Core Suggested Readings

- Rajesh Chakra Bharthi. 2006. The Financial Sector in India: Emerging Issues. New Delhi: Oxford University Press.

- Mohanan S and Benson Kunju Kunju. 2012. Financial Markets and Financial Services in India. New Delhi: New Century Publication.
- Bhavesh Bhatt. 2013. Financial Economics. Vista Publication.
- Machiraju H.R. 2018. Indian Financial System. Vikas Publishing Ltd.
- Avadhani V A. 2003. Investment and Securities Markets of India.Himalaya Publishing House.
- Thomas, Susan. 2003. Derivatives Markets in India.Tata McGraw-Hill.
- RBI Bulletin. CMIE Reports.Prime Data Base.sebi.com, nseindia.com, bseindia.com.
- R.E.Bailey. 2005.The Economics of Financial Markets.New York: Cambridge Private Ltd.
- H.R. Machiraju.2018. Indian Financial System. Vikas Publishing Ltd.
- Ramesh Babu G. 2005.Financial services in India. Concept publishing Company Ltd.

TEACHING LEARNING STRATEGIES

Lecture method

Discussion/ Debate

MOODLE

ICT

MODE OF TRANSACTION

Offline (face-to-face mode)/ online

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

Sample Questions to test Outcomes.

- 1.Examine how a sound financial system culminates in good economic development?
- 2.What is a financial market? What are basic pillars of a sound financial market?
- 3.Analyse the basic criteria for making a sound portfolio investment.

4.What do you know about global financial market and examine the innovative developments in global financial market.

5.Examine the recent innovations in the digitization of financial services

Mapping of COs with POs & PSOs

Course Outcomes	Programme Outcomes					Programme Specific Outcomes				
	PO 1	PO 2	PO 3	PO 4	PO 5	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
	CO 1	N	M	S	N	M	M	S	W	M
CO 2	M	M	S	S	M	S	S	S	S	M
CO 3	M	M	S	S	M	S	S	S	S	M
CO 4	S	S	S	S	S	S	S	M	S	S
CO 5	N	M	S	N	M	M	S	W	M	M

*S-Strong correlation, M-Moderate correlation; W- Weak correlation, N – No correlation

ECONOMICS OF GROWTH AND DEVELOPMENT

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

Course Description

PROGRAMME OUTCOMES (PO) relevant to this course

PO1, PO2, PO3, PO4, PO5, PO6, P07

PROGRAMME SEPCIFIC OUTCOMES (PSO) relevant to this course

PSO (1) Knowledge about the basic requirements for economic development of underdeveloped and developing countries.

PSO (2) Identify development issues of countries

PSO (3) Analysing various development related economic phenomenon in research

PSO (5) Attain competitive edge in mastering various theories of development

**SEMESTER IV
ECONOMICS OF GROWTH AND DEVELOPMENT**

DISCIPLINE SPECIFIC CORE COURSE

CREDIT- 4

COURSE CODE – MAECO04DSC13

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
3	1	4	45	30	75	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

C01	Understand various theories of development
C02	Examine how different sectors (agriculture, industry and service sectors) functioning and its impact on the economy.
C03	Critically evaluate the role of capital and technological advancement
C04	Evaluate the international developments and planning for development

*Course outcomes based on revised blooms taxonomy

COURSE CONTENTS

Module 1

1. Growth and development – Basic concepts (15 hours)

1. 1 Subject matter - Historical Records- Kuznet's characteristics
1. 2 Concepts and measurement of economic growth and development
1. 3 Indicators of Development
1. 4 Problems of Development
1. 5 New approaches to development

Suggested readings specific to the module.

- 1.1 J R. Hicks. 1965. *Capital and Growth*. New Delhi: OUP.
- 1.2 Gunnar Myrdal. 1968. *Asian Drama: An Inquiry In to the Poverty of Nations*. II Vol. New York: Pantheon.
- 1.3 *World Bank Development Reports for various years.*
- 1.4 UNDP. *Human Development Reports for various years.*
- 1.5 Debraj Ray. 2001. *Economics of Development*. New Delhi: Oxford University Press.

Module 2

2. Theories of growth and development (30 hours)

2. 1 Classical Theories
2. 2 Cambridge Growth models
2. 3 Neo- Classical Growth models
2. 4 Endogenous Growth models
2. 5 Partial theories of growth and development
2. 6 Dual Economy models
2. 7 Theories of migration

Suggested readings specific to the module.

- 2.1 Gerald M Meier and James E Rench (Ed).2005 *Leading Issues in Economic Development*.8th Edition.
- 2.2 A.P. Thirwall. 2003.*Growth and Development with Special Reference to Development Economics*. Palgrave.
- 2.3 Michael P. Todaro, and Stephen C. Smith. 2004. *Economic Development*, 8th Edition.
- 2.4 Hentry Wan (JR).1971. *Economic Growth*. penguin books.
- 2.5 Bakul H Dholakya and Raveendra H Dholakya. 1998. *Theory of Economic Growth and Technical Progress- An Introduction*. Delhi: MacMillian.
- 2.6 Hywd G Jones. 1976. *An Introduction to Modern Theory of Economic Growth*. McGraw Hill.
- 2.7 M.P.D.Todaro and S.C.Smith. 2005. *Economic development*. 8th Edition. Person Education. Delhi: Indian branch.

Module 3

Agriculture, Industry, Capital and Technology in development (15 hours)

3. 1 Agricultural policy in Developing countries- Globalisation and agriculture
3. 2 Role of Industrialization in Development – policies for Industrialisation
3. 3 Capital and Development- stages and sources of capital formation
3. 4 Choice of techniques – role of Intermediate technology- Issues related to transfer of technology

Suggested readings specific to the module.

- 3.1 Gerald M Meier and James E Rench (Ed).2005 *Leading Issues in Economic Development*.8th Edition.
- 3.2 D.Nayyar (Ed). 1994. *Industrial Growth and stagnation: The debate in India*. Oxford University Press.
- 3.3 J. Bhagawati and Padma Desai. 1970.*Planning for Industrialisation*. Oxford University Press.
- 3.4 M.P.D Todaro and S.C.Smith . 2005. *Economic development*. 8th Edition. Person Education. Delhi: Indian branch.

Module 4

International Aspects of Development and Planning (15 hours)

4. 1 Role of foreign trade and foreign capital in the Development process
4. 2 International Agencies and development
4. 3 Indian Planning Experiences- NITI Aayog
4. 4 Decentralized planning experience

Suggested readings specific to the module.

- 4.1 Agalwal and S.P. Singh (Ed). 1985. *The Economics of Underdevelopment*. Delhi: OUP, Delhi.
- 4.2 J.N. Bhagwati (Ed). 1985. *Dependence and Interdependence- Essays in Development Economics*. Vol-1&2,. Bombay: OUP.

4.3 Sukhomoy Chakraborty. 1998. *Development Planning –Indian Experience*. Delhi: OUP.

Debraj Ray. 2001. *Economics of Development*. New Delhi: Oxford University Press.

4.4 Gerald M Meier and James E Rench (Ed).2005 *Leading Issues in Economic Development*.8th Edition.

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

- Dreze Jean and Sen Amartya. 1993.*Hunger and public Action*. Delhi: OUP.
- J.N. Bhagwati (Ed). 1985. *Dependence and Interdependence- Essays in Development Economics*. Vol-1&2,. Bombay: OUP.
- A.P.Thirwall. 2003.*Growth and Development with Special Reference to Development Economics*. Palgrave.
- Agarwal and S.P. Singh (Ed). 1985. *The Economics of Underdevelopment*. Delhi: OUP, Delhi.
- Amartya Sen. 1999. *Development as Freedom*. New Delhi: Oxford University Press.
- Bakul H Dholakya and Raveendra H Dholakya. 1998. *Theory of Economic Growth and Technical Progress- An Introduction*. Delhi: MacMillian.
- Debraj Ray. 2001. *Economics of Development*. New Delhi: Oxford University Press.
- Hentry Wan (JR).1971. *Economic Growth*. penguin books
- Hywd G Jones. 1976. *An Introduction to Modern Theory of Economic Growth*. McGraw Hill
- Michel P Todaro. 1923. *Economics for Developing World*. London: Longman.

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

- Yujiro Hayami and Yoshihisa Godo. 2005. *Development Economics* (3rd Edn). New Delhi: Oxford University Press.
- M.P.Todaro and S.C. Smith . 2005. *Economic development*. 8th Edition. Person Education. Delhi: Indian branch.
- Vandana Desai and Robert B Potter. 2008. *The Companion to development studies-II* edn. A hodder viva edn,. New Delhi: Viva books Pvt Ltd
- H L Ahuja. 2016. *Development Economics*. Edited by S.Chand.

TEACHING LEARNING STRATEGIES

Flipped classroom
Active learning
Digital learning
Group/Team work

MODE OF TRANSACTION

Hybrid

ASSESSMENT RUBRICS Marks

End Semester Evaluation	60
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Continuous Evaluation	40
4 Seminar	16
5 Exams (2)	16
6 Assignment	8

Sample Questions to test Outcomes.

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

Mapping of COs with POs & PSOs

Course Outcomes	Programme Outcomes							Programme Specific Outcomes			
	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3	PSO 5
CO 1	S	S	M	S	S	S	S	S	S	S	S
CO 2	S	S	M	S	S	S	S	S	S	S	S
CO 3	S	S	M	S	S	S	S	S	S	S	S
CO 4	S	S	M	S	S	S	S	S	S	S	S

***S-Strong correlation, M-Moderate correlation; W- Weak correlation, N – No correlation**

DATABASES ON THE INDIAN ECONOMY

The course intends to expose the students the world of secondary data and its benefits by introducing the secondary sources of socio-economic data of the world, in India and Kerala. The various socio-economic databases will be introduced along with hands on training on how to acquire the data from the sources. Basic data analysis using Ms Excel, Google Spreadsheet, SPSS and Stata software will be taught in the lab sessions. The course intends to equip the students to the growing needs of the data analytical profession in the modern economy.

Course Objectives

1. Explain the importance of data for economics

2. Knowledge of the various taxonomies of data and its management
3. Knowledge of the various types of data and its sources for the World and Indian Economy
4. Develop data using skills using the databases learned

PROGRAMME OUTCOMES (PO) relevant to this course

PO1, PO2, PO3, PO4, PO6, P07

PROGRAMME SEPCIFIC OUTCOMES (PSO) relevant to this course

PSO (1) Knowledge of the concept of data and its various taxonomies

PSO (2) Knowledge of various databases required for economics analysis

SEMESTER I

DISCIPLINE SPECIFIC ELECTIVE COURSE

Course Code: MAECO01DSE01

Course Name: DATABASES ON THE INDIAN ECONOMY

Credit			Teaching Hours			Marks		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
1	2	3	15	60	75	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

C01	Explain the various types of data, its management and its importance for policy making
C02	Examine the databases of the Indian economy and the world economy
C03	Evaluate the importance of census data and survey data
C04	Download data tables and figures for analysis from various databases

***Course outcomes based on revised blooms taxonomy**

COURSE CONTENTS

Module 1

(8 hours)

1.1 Introduction to data

1.2 Data as public good

1.3 Rise of the Open data

1.4 Integrated data system and the role of various entities

Suggested readings specific to the module.

1.1 World Bank. 2021. 'World Development Report 2021: DATA FOR BETTER LIVES.' Available at <https://www.worldbank.org/en/publication/wdr2021>

1.2 Rao, T. J. (2010). Official Statistics in India: The past and the present. Journal of Official Statistics, 26(2), 215.

1.3 Mohan, R. (2007). *Statistical System of India: Some Reflections* (Speech given at RBI).

1.4 Marc Riedel, 2005. **Secondary Data**. Editor(s): Kimberly Kempf-Leonard in Encyclopedia of Social Measurement, Elsevier. Pages 455-461, <https://doi.org/10.1016/B0-12-369398-5/00071-2>

Module 2

(11 hours)

2.1 Overview of Statistical system in India

2.2 MOSPI and its data

2.3 Macroeconomic data in India

2.4 The role of RBI in India's statistical system

Suggested readings specific to the module.

2.1 Narayana, Ranjan and Tyagi. 2021. Basic Computational Techniques For Data Analysis: An Exploration in MS-Excel. Sage India.

2.2. Govt of India. 2015. 'e-Book 2015' MOSPI. Available at https://mospi.gov.in/sites/default/files/main_menu/ebook/index.html#page/2

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

2.4 Govt of India. 2022. 'Datasets and Registries in India.' MOSPI. Available at https://mospi.gov.in/sites/default/files/publication_reports/Datasets%20and%20Registries%20in%20India%2020221651228036618_0.pdf

Module 3

(8 hours)

3.1 External sector linkages and data sources

3.2 International databases

3.3 Evaluating SDGs and Climate change

3.4 Unofficial data sources

Suggested readings specific to the module.

3.1 United Nations. UNDATA. Available at <http://data.un.org/datamartinfo.aspx>

3.2 World Bank. 2021. 'World Development Report 2021: DATA FOR BETTER LIVES.' Available at <https://www.worldbank.org/en/publication/wdr2021>

3.3 United Nations. <https://unstats.un.org/sdgs/dataportal>

3.4 Schade et al. 2017. 'Using new data sources for policymaking.' Joint Research Centre (JRC), the European Commission's science and knowledge service. Available at [https://publications.jrc.ec.europa.eu/repository/bitstream/JRC109472/jrc109472_final_online\(1\).pdf](https://publications.jrc.ec.europa.eu/repository/bitstream/JRC109472/jrc109472_final_online(1).pdf)

Module 4 (Lab)

(8 hours)

4.1 New methods of data collection and new datasets

4.2 Census data and data sources on migration

4.3 Gendered dimensions

4.4 Databases on Kerala

Suggested readings specific to the module.

4.1 World Bank. 2021. 'World Development Report 2021: DATA FOR BETTER LIVES.' Available at <https://www.worldbank.org/en/publication/wdr2021>

4.2 Schade et al. 2017. 'Using new data sources for policymaking.' Joint Research Centre (JRC), the European Commission's science and knowledge service. Available at [https://publications.jrc.ec.europa.eu/repository/bitstream/JRC109472/jrc109472_final_online\(1\).pdf](https://publications.jrc.ec.europa.eu/repository/bitstream/JRC109472/jrc109472_final_online(1).pdf)

4.3 Government of Kerala. 2020. Economic Review 2020 | State Planning Board, Thiruvananthapuram, Kerala, India

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

- GoI. 2001. 'Report of Dr Rangarajan Commission' MOSPI. Available at <https://www.mospi.gov.in/report-dr-rangarajan-commission>
- RBI. 2017. Comprehensive Guide for Current Statistics of the RBI Monthly Bulletin. Available at <https://m.rbi.org.in/scripts/PublicationsView.aspx?id=17618>
- United Nations. 'Global Migration Database.' Available at <https://www.un.org/development/desa/pd/global-migration-database>
- IMF. Climate Change data. Available at <https://climatedata.imf.org/pages/climatechange-data>

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

- IMF. 2023. World Economic Databases. Available at <https://www.imf.org/en/Publications/WEO/weo-database/2023/April/select-subjects?c=534>,
- Giovanninni, E. 2008. 'Understanding Economic Statistics AN OECD PERSPECTIVE.' Available at <https://www.oecd.org/sdd/41746710.pdf>

TEACHING LEARNING STRATEGIES

- **Flipped classroom**
- **Active learning**
- **Digital learning**

- **Group/Team work**

MODE OF TRANSACTION

- **Hybrid**

Sample Questions to test Outcomes.

1. Examine the potential of data for evidence-based policy making
2. Evaluate the potential of data as a public good?
3. Examine the functions of NSSO
4. Evaluate from BOP, the performance of invisibles and remittance flows to Indian economy. What are the data sources for providing a comparative picture with other countries?
5. Examine the differences between India's internal and external debt. What are the data sources?
6. **Examine the potential of UNCTAD data**

ASSESSMENT RUBRICS Marks

End Semester Evaluation	60
Continuous Evaluation	40
1. Seminar	16
• Exams (2)	16
• Assignment	8

Mapping of Course Outcomes to PSOs/POs

	PSO1	PSO2	PO1	PO2	PO2	P04	PO6	PO7
CO1	3	2	1	3	3	3	3	3
CO2	3	2	1	3	3	3	3	3
CO3	3	2	1	3	3	3	3	3
CO4	3	2	2	3	3	3	3	3
CO5	2	3	1	3	3	3	3	3

CORPORATE SOCIAL RESPONSIBILITY AND DEVELOPMENT

Course Description

The course is divided into four modules. The course intends to familiarize the students with the concept of CSR. The emergence of CSR has far reaching impact on the social developmental fabric of India. The collaboration of companies and NGOs with community has created a developmental experience in the country. The paper also focuses on certain case studies of CSR

Course Objectives

1. It intends to provide the basic information about CSR and its scope and dimension
2. It examines the important strategies and principles involved in CSR
3. It also examines different models of CSR practiced in the business world
4. It also explores different case studies of successful CSR in ensuring social and environmental development.

SEMESTER -I DISCIPLINE SPECIFIC ELECTIVE COURSE Course Code: MAECO01DSE02

CREDIT-3

Course Name: Corporate Social Responsibility and Development

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
2	1	3	30	30	60	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

CO1	The student will understand different dimensions of the concept of CSR
CO2	They will study about different models of CSR and identify the best models
CO3	They will study the role of CSR in mitigating different cases of societal deprivations in the field of education, health and sanitation.

COURSE CONTENTS

Module 1: Understanding CSR

- 1.1 Concept and Definition; Evolution and Scope of CSR
- 1.2 Types: Environmental-Ethical- CSR as Charity-Philanthropic and Financial
- 1.3 Subject matter of CSR: -Basic Constituents of CSR
- 1.4 Principles and Strategies of CSR
- 1.5 Best Practices of CSR
- 1.6 Need for CSR
- 1.7 Arguments for and Against CSR

Suggested readings

- 1.1 to 1.4 Baxi C (2000) Corporate Social Responsibility: concepts and cases, The Indian Experience, New Delhi, India Excel Books

1.5 to 1.7 Bhattacharya (2005) *Corporate Social Development: Paradigm shift*, New Delhi, Concept Publishing company

Module 2: CSR and Development

2.1 Development- Meaning, Elements and Measures: Economic Growth-Social Inclusion and Environmental Protection

2.2 Extended role of Companies in Developing Countries

2.3 Strategic CSR- role of stake holders in CSR strategy

2.4 Corporate Governance- Meaning and Context

2.5 Corporate Governance Mechanisms-Internal and External

2.6 Models of Corporate Governance

Suggested readings

2.1 Werther W and Chandler D (2006) *Strategic Corporate Social Responsibility Stake holders in a global environment*, thousand Oaks, Sage Publications

2.2 Agarwal S(2008) *CSR in India*, Los Angeles,Response publications

2.3 David Crowther and Guler Aras (2008), *Corporate Social Responsibility*, David Crowther, & Guler Aras & Ventus Publishing Aps.

2.4 Michael Hopkins (2007), *Corporate Social Responsibility and International Development. Is Business the Solution?* Earthscan, London.

2.5- & 2.6-Mark Anthony Camilleri (2017), *Corporate Sustainability, Social Responsibility and Environmental Management: An Introduction to Theory and Practice with Case Studies*, Springer International Publishing.

Module 3: Models of CSR

3.1 Friedman Model

3.2 Ackerman Model

3.3 Carroll Model

3.4 Environmental Integrity and Community Model

3.5 Corporate Citizenship Model

3.6 Stockholders and Stakeholders Model

Suggested readings

3.1 to 3.6 Baxi C.V and Ajit Prasad (2005), *Corporate Social Responsibility: Concepts and Cases-The Indian Experience*, Excel Books, New Delhi.ent D. Beal (2014), *Corporate Social Responsibility: Definition, Core Issues, and Recent Developments*, Sage Publications Ltd. London.

Module 4: CSR in Indian Perspective

4.1 CSR in India

4.2 Dimensions and Importance

4.3 The Drivers of CSR in India

4.4 CSR Companies in India

4.5 CSR Initiatives and Activities in India

4.6 Case studies from different companies

4.7 CSR and social change in India

Suggested readings

4.1 to 4.4 Nirbhay Lumde,(2018),*Corporate Social Responsibility in India: A Practitioner's Perspective*". Notion Press, Chennai.

4.5 to 4.7 Nayan Mitra and Rene' Schmidpeter,(2017), *Corporate Social Responsibility in India: Cases and Development After the Legal Mandate*. Springer International Publishing, Switzerland.

Core Compulsory Readings

- Ravi Raj Atrey, (2020), *Exploring Corporate Social Responsibility: Fundamentals and Implementation*, 2nd Edition Studera Press, Delhi
- Andreas Rasche, Mette Morsing and Jeremy Moon,(2017), *Corporate Social Responsibility: Strategy, Communications and Governance*, Cambridge University Press, UK.

Core Suggested Readings

- Baxi C (2000) *Corporate Social Responsibility: concepts and cases*, The Indian Experience, New Delhi, India Excel Books
- Bhattacharya (2005) *Corporate Social Development: Paradigm shift*, New Delhi, Concept Publishing company
- Werther W and Chandler D (2006) *Strategic Corporate Social Responsibility Stake holders in a global environment*, thousand Oaks, Sage Publications
- Agarwal S(2008) *CSR in India*, Los Angeles, Response publications
- David Crowther and Guler Aras (2008), *Corporate Social Responsibility*, David Crowther, & Guler Aras & Ventus Publishing Aps.
- Michael Hopkins (2007), *Corporate Social Responsibility and International Development. Is Business the Solution?* Earthscan, London.
- Mark Anthony Camilleri (2017), *Corporate Sustainability, Social Responsibility and Environmental Management: An Introduction to Theory and Practice with Case Studies*, Springer International Publishing.
- Baxi C.V and Ajit Prasad (2005), *Corporate Social Responsibility: Concepts and Cases-The Indian Experience*, Excel Books, New Delhi.ent D. Beal (2014), *Corporate Social Responsibility: Definition, Core Issues, and Recent Developments*, Sage Publications Ltd. London.
- Nirbhay Lumde,(2018), *Corporate Social Responsibility in India: A Practitioner's Perspective*". Notion Press, Chennai.

- Nayan Mitra and Rene' Schmidpeter,(2017), *Corporate Social Responsibility in India: Cases and Development After the Legal Mandate*. Springer International Publishing, Switzerland.

TEACHING LEARNING STRATEGIES

- Lecture method
- Discussion/ Debate
- ICT

MODE OF TRANSACTION

- Offline (face-to-face mode)

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

Teaching Learning Strategies

A. Continuous Internal Assessment (CIA)

1. Internal Test – Descriptive and analytical type of questions and problems are involved.
2. Book review – every student to review a seminal work on any topic relevant to the course and submit a report
3. Seminar Presentation -with scope for detailed discussion and argument on the theme
4. Assignments – Fundamental topics in the concerned area in the light of burning issues relating to the subject shall be presented and discussed by the learner in the class
5. Online presentations-students may be asked to prepare online teaching and learning materials so as to enable them to be trained in flipped class room mode of teaching

ECONOMICS OF HEALTH

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.

Course Objectives

1. To Enable the Students about the importance of health.
2. To Impart Knowledge Regarding the Various health services in the country.

SEMESTER-I
DISCIPLINE SPECIFIC ELECTIVE COURSE
COURSE CODE: MAECO01DSE03
CREDIT-3

COURSE NAME: ECONOMICS OF HEALTH

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
2	1	3	30	30	60	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

CO1	Outline the dimensions of health.
CO2	Identify the occupational health hazards and its linkages
CO3	Analyze economics of public health.
CO4	Measure burden of disease and future challenges.
CO5	Construct the production function with respect to health.

COURSE CONTENTS

Module 1: Health Economics – Basic Concepts

- 1.1 Definition and Dimensions of Health
- 1.2 Meaning and Importance of Health Economics
- 1.3 Determinants of Health
- 1.4 Input and Output Indicators of Health

Suggested readings

1.1, 1.2 Holland, Goodman and Stano. 2009. The Economics of Health and Health Care. Pearson Education.

1.3, 1.4 Zweifel, P and Breyer, F. 1997. The Health Economics. OUP: Oxford.

Module 2: Health and Development

- 2.1 Income and Health Linkages

2.2 Concept of Wellbeing

2.3 PQLI and HDI

2.4 Poverty and Health

2.5 Occupational Health Hazards

2.6 Fertility, Morbidity, Mortality and Life Expectancy

2.7 Nutrition and Health – Mal –Nutrition – Under – Nutrition.

Suggested readings

2.1 to 2.3 Turshen. M .1989.The Politics of Health. London: Zed Books Ltd.

2.4 to 2.7 Monica Das Gupta, Chen. L.C and Krishnan T. N. 1996. Heath, Poverty and Development in India. New Delhi: OUP.

Module 3: Health as Investment

3.1 Economics of public Health

3.2 Education and Health

3.3 Concept of Health Education

3.4 Capital Formation in Health Care

Suggested readings

3.1, 3.2 Holland, Goodman and Stano. 2009. The Economics of Health and Health Care. Pearson Education.

3.3, 3.4 Zweifel, P and Breyer, F. 1997. The Health Economics. OUP: Oxford.

Module 4: Micro Economics of Health Services

4.1 Demand for health services

4.2 Preference for health care and health cure

4.3 Income and price effects – Physician as a price – Discriminating monopolist

4.4 Health production Function with Illustration.

Suggested readings

4.1, 4.2 Lee, Kenneth and Anne Mills ed. 1985.The economics of Health in Developing Countries. OUP: Oxford.

4.3, 4.4 Baru, R, V. 1998. Private Health Care in India: Social Characteristics and Trends. New Delhi: Sage publications.

Core Compulsory Readings

- Dr. Harinder Singh (2009), Health, Nutrition and Economic Development, Regal Publication (New Delhi).

- N.K.Anand&ShikhaGoel (2006), Health Economics, AITBS Publishers (India).

Core Suggested Readings

- 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)
- AshaA.Bhende and Tara Kanitkar (2001), Principles of Population Studies (Himalaya Publishing House, New Delhi).
- Government of India (1983), National Health Policy, New Delhi.
- <https://www.healthknowledge.org.uk/public-health-textbook/medical-sociology-policy-economics/4d-health-economics/principles-he>
- <https://www.who.int/choice/en/>
- Indian Council of Social Science, Research and Indian Council of Medical Research (1981), Health for All 2002 A.D. (ICSSR, Delhi).
- Jean Dreze and Amartyasan (1998), Indian Economics Development and Social opportunity (Oxford University Press).
- Michall H. Cooper and Antony J. Culyer (1973), Helath Economics (Balsimore, Penquin Books Inc).
- Park, K. (2000), Park’s Text Book of preventive and Social Medicine. 16th edition (M/s. BanarsidasBhanot Publishers, Jalalpur).
- 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)
- William Jack (1999), Principles of Health Economics for Developing Countries, WBI Development Studies (The World Bank, Washington.D.C).

TEACHING LEARNING STRATEGIES

Lecture method
Group discussion/ debate
MOODLE
ICT

MODE OF TRANSACTION

- Offline/online

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

POPULATION STUDIES

Course Description

The course is divided into four modules which cover nature of population studies, structure and growth of population, theories of population, population dynamics- mortality and fertility, migration, urbanization, population projection and population policy .

Course Objectives

1. To make the students to understand about the demography.
2. To know about the reasons for migration.
3. To understand the population policy in India
4. To equip the students with the knowledge regarding the relationship between demography and economic development and to understand the population trends in India.

SEMESTER II DISCIPLINE SPECIFIC ELECTIVE COURSE

Course Code: MAECO02DSE04

CREDIT-3

Course Name: POPULATION STUDIES

Credit			Teaching Hours			Assessment	
L/T	P/I	Total	L/T	P/I	Total	CE	ESE
2	1	3	30	30	60	40	60

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

CO Number	CO Statement
CO 1	Describe the growth of population in India
CO 2	Examine the theories of population
CO 3	Understand the concepts of Fertility, Nuptiality and Mortality
CO 4	Analyse the reasons for migration
CO 5	Develop a proactive attitude towards the population policy

COURSE CONTENTS

Module 1

Population studies:

- 1.1 Meaning-Nature-Scope-Importance-basic concepts
- 1.2 Population data- Methods and Sources
- 1.3 World population growth and distribution
- 1.4 Population growth in India and Kerala
- 1.5 Theories of Population growth
- 1.6 Structure and characteristics of Indian Population
- 1.7 Sex and Age structure
- 1.8 Population Ageing- Ageing in India and Kerala- Emerging Issues
- 1.9 Gender issues and development**

Suggested readings

- 1.1 to 1.5 Asha A. Bhande and Tara Kanikkar. 1988. *Population Studies*. Himalaya Publishing House.
- 1.6 Prasad P.K. 1990. *Population Planning, Policy and Programme*. New Delhi: Deep and Deep Publications.
- 1.7 Colin Neuwell. 1998. *Methods and Models in Demography*. London: Belhaven Press.
- 1.8 & 1.9 Peter R. Cox. 1989. *Demography*. New Delhi: Universal Book Stall.

Module 2

Population Dynamics: Mortality & Fertility

- 2.1 Mortality
- 2.2 Measures of Mortality
- 2.3 Use of Life Table Techniques
- 2.4 Sex and Age Pattern of Mortality
- 2.5 Mortality Differentials
- 2.6 Level and Trends in Mortality
- 2.7 Fertility- Level and Trends
- 2.8 Nature of Fertility- Nuptiality
- 2.9 Measures of fertility
- 2.10 Differentials in Fertility
- 2.11 Theories of Fertility

Suggested readings

- 2.1 to 2.6 P.G.K. Panikar and C.R. Soman. 1985. *Health Status of Kerala*. Trivandrum: Centre for Development Studies.
- 2.7 to 2.9 Demeny and Geoffrey Menicoll. 1998. *Population and Development*. Earth Scan Publications.
- 2.10 & 2.11 D.J. Bogue. 1971. *Principles of Demography*. Wiley.

Module 3

Migration & Urbanization:

- 3.1 Migration- Basic concepts- Importance
- 3.2 Types of Migration
- 3.3 Migration Differentials
- 3.4 Levels and Trends of Migration

- 3.5 Socio- Economic aspects of Migration
- 3.6 Theories of Migration
- 3.7 Techniques of Measurement of Migration
- 3.8 Urbanization- measures
- 3.9 Distribution and Trends in Urban Population
- 3.10 Factors affecting Urbanization

Suggested readings

- 3.1 to 3.8 Rajendra K Sharma. 2007. *Demography and Population Problems*. Atlantic Publishers
- 3.9 & 3.10 D.J. Bogue. 1971. *Principles of Demography*. Wiley.

Module 4

Population Projection and Population Policies in India:

- 4.1 Population Projection – types
- 4.2 Importance of Population Projections
- 4.3 Techniques for measuring population projection
- 4.4 Family welfare programmes
- 4.5 Uses of population data in development planning
- 4.6 Population Policies and Programmes in India

Suggested readings

- 4.1 to 4.3 Rajendra K Sharma. 2007. *Demography and Population Problems*. Atlantic Publishers.
- 4.4 to 4.6 B.D. Misra. 1980. *An Introduction to the study of population*. South Asian Publishers.

Core Compulsory Readings

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

Core Suggested Readings

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

TEACHING LEARNING STRATEGIES

- Lecture method
- Group discussion/ debate
- MOODLE
- ICT

MODE OF TRANSACTION

- Offline (face-to-face mode)/ online

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

Sample Questions to test Outcomes.

1. 'Population as a limit to growth', population as an ultimate source'- discuss.
2. Critically examine optimum theory of population.
3. Analyze the factors influencing mortality.
4. Evaluate the economic impact of international migration.
5. Assess population policy in India.

Mapping of COs with POs & PSOs

Course Outcomes	Programme Outcomes					Programme Specific Outcomes			
	PO 1	PO 2	PO 3	PO 4	PO 5	PSO 1	PSO 2	PSO 3	PSO 4
CO 1	N	M	S	N	M	M	S	W	M
CO 2	M	M	S	S	M	S	S	S	S
CO 3	M	M	S	S	M	S	S	S	S
CO 4	S	S	S	S	S	S	S	M	S
CO 5	N	M	S	N	M	M	S	W	M

*S-Strong correlation, M-Moderate correlation; W- Weak correlation, N – No correlation

PUBLIC ECONOMICS
Course Description

The course is divided into four modules. The course intends to familiarize the students with the concept of functions of public finance, public expenditure, public revenue, budgeting and federal finance.

Course Objectives

1. To understand the fiscal functions, theories, shifting and incidence and to teach the students the various types of taxes.
2. To enable the students to understand the theories of public expenditure and public debt.
3. To enrich their knowledge regarding fiscal policy, budgetary policy and federal finance.

SEMESTER II
DISCIPLINE SPECIFIC ELECTIVE COURSE
CREDIT-3

Course Code: MAECO02DSE05

Course Name: PUBLIC ECONOMICS

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
2	1	3	30	30	60	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

CO1	Understand the functions of state and nature of public goods
CO2	Analyze the growth of theories of taxation and incidence of taxation
CO3	Analyze the theory of public expenditure and models of public debt
CO4	Analyze the role of fiscal policy in economic stability
CO5	Evaluate principles, policies and techniques of budget
CO6	Examine the center-state financial relations and scope for local finance.

COURSE CONTENTS

Module 1: Functions of Public finance and types of public goods

1.1 Fiscal Functions: Allocation Function, Distribution Function and Stabilization Function.

1.2 Public Goods – meaning, types

1.3 Private Goods, Social Wants, Merit Wants

Suggested readings

1.1 Huch Dalton, Principles of Public Finance, Allied Publishers, Vikas Publishing House, 2019

1.2 S.K,Singh, Public Finance in Theory and Practice, S.Chand and Company Ltd, New Delhi, 2019

1.3 Lekhil R.K.,Johinder, Public Finance, Popular,2018 4. Bose.D, Ganesan.S and Marimuthu A,

An Introduction to Public Finance, S.Chand and Company Ltd, New Delhi, 2012

Module 2: Taxation

2.1 Theories of Taxation: The Physiocratic Theory, Financial Theory, Ability to Pay Theory,

Benefit Theory, Cost of Service Theory, Taxable Capacity.

2.2 Incidence and Shifting of Taxation: Concentration theory, Modern Theory, Musgrave Theory, Factors Influencing Incidence

2.3 Types of Shifting: Forward and Backward Incidence

2.4 Incidence of Taxation under different Market Conditions

2.5 Tax and Non-tax Revenue: Tax and Non-Tax Revenue of the Central Government and State Government: GST, MODVAT

2.6 New Tax Reform in India

Suggested readings

2.1, 2.2, 2.3 Huch Dalton, Principles of Public Finance, Allied Publishers, Vikas Publishing House, 2019

2.4 S.K,Singh, Public Finance in Theory and Practice, S.Chand and Company Ltd, New Delhi, 2019

2.5, 2.6 Lekhil R.K.,Johinder, Public Finance, Popular,2018 4. Bose.D, Ganesan.S and Marimuthu A,

An Introduction to Public Finance, S.Chand and Company Ltd, New Delhi, 2012

Module 3: Public Expenditure and Public Debt

3.1 Theories of public expenditure: Pure Theory, General Theory

3.2 Reasons for the Growth of Public Expenditure.

3.3 Principles of Public Debt Management

3.4 Domar's Model of Public Debt

3.5 Modern Theory of Public Debt

3.6 Deficit Financing: Meaning, objectives, types

3.7 Deficit financing in India: Role and effects of Deficit Financing

Suggested readings

3.1, 3.2, 3.3 Huch Dalton, Principles of Public Finance, Allied Publishers, Vikas Publishing House, 2019

3.4, 3.5 S.K.,Singh, Public Finance in Theory and Practice, S.Chand and Company Ltd, New Delhi, 2019

3.6, 3.7 Lekhil R.K.,Johinder, Public Finance, Popular,2018 Bose.D, Ganesan.S and Marimuthu A, An Introduction to Public Finance, S.Chand and Company Ltd, New Delhi, 2012

Module 4: Budgetary Policy and Federal Finance

4.1 Fiscal Policy and Economic Stability

4.2 Budgetary Policy: Objectives and Elements of Budgetary Policy

4.3 Techniques of Budgeting

4.4 Principles of Budgeting

4.5 Performance Budgeting and Zero-Based Budgeting

4.6 Principles and Problems of Federal Finance

4.7 Centre-State Financial Relations

4.8 Finance Commission

4.9 Local Finance

Suggested readings

4.1, 4.2, 4.3, 4.4 H.L.Bhatia, Public Finance, Vikas, Noida, 2012

4.5 B.P.Tyagi - Public Finance – Jai PrakashNath& Co, Meerut, 2002

4.6, 4.7, 4.8, 4.9 R. Cauvery et al – Public Finance – S.Chand& Company Ltd, New Delhi

Core Compulsory Readings

- Amaresh Bagchi. 2005. Readings in Public Finance, Oxford University Press, New Delhi.
- D.N. Dwivedi. 1994. Reading in Indian Public Finance. New Delhi:Wiley Eastern Ltd.
- Harvey S. Rosen. 1995. Public Finance 4 th Edition, Richard D. Irwin, Chicago.
- M Govinda Rao. 2009. Fiscal Federalism in India- Trends and Issues. In Shinichi Ichimura & Roy Bahl Eds. Decentralization Policies in Asian Development.World Scientific Publishing Company.
- Public Finance-Policy Issues for India (ed.) SudiptoMundle. Calcutta: OUP.
- Sudipto Mundle and GovindRao.1997. Public Expenditure in India: Trends &Issues in
- Y, V Reddy & G.V Reddy. 2019. Indian Fiscal Federalism. OUP.

Core Suggested Readings

An Introduction to Public Finance, S.Chand and Company Ltd, New Delhi, 2012

- B.P.Tyagi - Public Finance – Jai PrakashNath& Co, Meerut, 2002
- D.M.Mithani, Modern Public Finance: Theory and Policy, Himalaya Publishing House, New Delhi, 2014
- H.L.Bhatia, Public Finance, Vikas, Noida, 2012
- Huch Dalton, Principles of Public Finance, Allied Publishers, Vikas Publishing House, 2019

- Lekhil R.K.,Johinder, Public Finance, Popular,2018 4. Bose.D, Ganesan.S and Marimuthu A,
New Delhi, 2018
- Om Prakash - Public Economics Theory and Practice – Vishal Publishing Co., New Delhi, 2012.
- R. Cauvery et al – Public Finance – S.Chand& Company Ltd, New Delhi
- S.K,Singh, Public Finance in Theory and Practice, S.Chand and Company Ltd, New Delhi, 2019
- Sreenivasan.K. and Dayananda K.C., Money and Public Finance, Himalaya Publishing House,

TEACHING LEARNING STRATEGIES

Lecture method
Group discussion/ debate
MOODLE
ICT

MODE OF TRANSACTION

- Offline/online

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

ECONOMICS OF EDUCATION

Course Description

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.

On the successful completion of the course, the student will be able to

Course Objectives

1. Understanding the significance of Economics of Education.
2. Analyzing the Education and Economic Development.
3. Knowing the Role of State in Financing Education.
4. Assessing the Methods of Financing Education.
5. Ability to know the Production of Education

SEMESTER II DISCIPLINE SPECIFIC ELECTIVE COURSE

CREDIT-3

ECONOMICS OF EDUCATION Course Code: MAECO02DSE06

Credit			Teaching Hours			Assessment	
L/T	P/I	Total	L/T	P/I	Total	CE	ESE
2	1	3	30	30	60	40	60

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

PROGRAMME OUTCOMES (PSO) relevant to this course

PO (1), PO (2), PO (3), PO (4), PO (5), PO (6), PO (7)

Module – 1

Introduction to Economics of Education - Human capital theory; Critique of human capital theory: Job competition, Screening, and Signaling hypothesis, Education, earnings and national wellbeing, Education and employment – viz., segmented labour market theories, Rate of return to education: cost-benefit analysis, cost-effectiveness analysis

Module – II

Education and Economic Development Contribution of education to economic growth, Denison's growth accounting Contribution of labour; Endogenous Growth Theories

Module – III

Public Finance: Role of State in Financing Education Principles of financing education: Equity, Efficiency, Adequacy; Education and distribution, inequality; Distribution of public spending on education; Importance of public expenditure on education; its impact on development; Determinants of expenditure on education – Public Household

Module – IV

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; Mobilisation of Resources for Education Private sector, community contributions; External aid. - Role of School Resources -Role of Teachers -Role of Incentives.

Essential Reading

- Goon, Gupta, Dasgupta, Fundamentals of Statistics, Vol I, World Press Private limited.
- Bowman M.J., et al: eds. Readings in Economics of Education. UNESCO, 1962.
- Carnoy, M., ed. (1995) International Encyclopedia of Economics of Education. Oxford.
- Pergamon Johnes, G and Johnes, J., eds. International Handbook on the Economics of Education.
- Psacharopoulos, G., ed. (1987) Economics of Education. New York: Pergamon.
- Schultz, T.W. (1971) Investment in Human Capital. New York: Free Press Vaizey
- John (1962): Economics of Education. London: Faber & Faber Eric A. Hanushek (From the Handbook of Economics of Education, Hanushek
- 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).
- <http://epaa.asu.edu/epaa/v13n42/> Raj Chetty, John N. Friedman, Jonah E. Rockoff, “Great Teaching: Measuring its effects on students’ future earning” http://educationnext.org/files/ednext_20123_Friedman.pdf.
- W. Steven Barnett, “Benefit-Cost Analysis of the Perry Preschool Program and Its Policy Implications” Educational Evaluation and Policy Analysis, 7 (4), pp. 3

TEACHING LEARNING STRATEGIES

Flipped classroom

Active learning

Digital learning

Group/Team work

MODE OF TRANSACTION

Hybrid

ASSESSMENT RUBRICS

Marks

End Semester Evaluation	60
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Continuous Evaluation	40
7 Seminar	16
8 Exams (2)	16
9 Assignment	8

MANAGERIAL ECONOMICS
Course Description

The course is divided into four modules. The course intends to familiarize the students with the concept of managerial economics and discuss the micro economic concepts in managerial decision making.

Course Objectives

1. To apply micro economic concepts and techniques in evaluating business decisions taken by firms.
2. To explain how tools of standard price theory can be employed to formulate a decision problem.

DISCIPLINE SPECIFIC ELECTIVE COURSE
SEMESTER -II

Course Name: MANAGERIAL ECONOMICS

CREDIT-3

COURSE CODE: MAECO02DSE07

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
2	1	3	30	30	60	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

CO1	Describe the basic concepts of managerial economics.
CO2	Describe how changes in demand and supply affect
CO3	Explain relationships between production and cost
CO4	Define key characteristics and consequences of different forms of markets

COURSE CONTENTS

Module 1: Nature and Scope of Managerial Economics

- 1.1 Meaning of managerial economics
- 1.2 Nature, scope and functions of managerial economics
- 1.3 Uses and limitations of managerial economics

Suggested readings

- 1.1, 1.2 P .L.Mehta: *Managerial Economics - Analysis, problems and causes*. Sultan Chand & Sons, 1992.
- 1.3 R.L. Varshney and K.L.Maheswari: *Managerial Economics*. Sultan Chand & Sons, 1987.

Module 2: Demand Analysis

- 2.1 Demand and its determinants
- 2.2 Factors involved in Demand forecasting
- 2.3 Methods of demand forecasting

Suggested readings

- 2.1, 2.2 Joel Dean: *Managerial Economics*. Prentice Hall of India, 1987.
- 2.3 Mote, Paul and Gupta: *Managerial Economics Concepts and cases*, 1979.

Module 3: Production Analysis

- 3.1 Production function
- 3.2 Law of variable proportions
- 3.3 Cost: Total, Average and Marginal cost
- 3.4 Revenue: Total, Average and Marginal revenue
- 3.5 Breakeven Point

Suggested readings

- 3.1 to 3.5 Dominick Salvatore. 2003. *Microeconomics: Theory and Applications*. Oxford University Press.

Module 4: Pricing Techniques & Profit Management

- 4.1 Types of pricing techniques
- 4.2 Meaning of profit
- 4.3 Nature of Profit - Accounting profit and Economic profit
- 4.4 Theories of profit

Suggested readings

- 4.1 S. Sankaran – *Managerial Economics*, Margham Publications, Madras, 2013. 47
- 4.2 to 4.4 Ahuja H.L. (2008) - *Principles of Micro Economics* (21st Revised Edition), *A New look at Economic Theory*, S.Chand, New Delhi.

Core Compulsory Readings

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

Core Suggested Readings

- S. Sankaran – *Managerial Economics*, Margham Publications, Madras, 2013. 47
- Ahuja H.L. (2008) - *Principles of Micro Economics* (21st Revised Edition), *A New look at Economic Theory*, S.Chand, New Delhi.

- P .L. Mehta: *Managerial Economics - Analysis, problems and causes*. Sultan Chand & Sons, 1992.
- R.L. Varshney and K.L.Maheswari: *Managerial Economics*. Sultan Chand & Sons, 1987.
- Joel Dean: *Managerial Economics*. Prentice Hall of India, 1987.
- Robert H. Frank. 2000. *Microeconomics and Behaviour*. Irwin Mc. Graw Hill.
- Robert Y. Awh. 1976. *Microeconomics: Theory and Applications*. John Wiley and Sons.

TEACHING LEARNING STRATEGIES

- Lecture method
- ICT

MODE OF TRANSACTION

- Offline (face-to-face mode)

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

AGRICULTURAL ECONOMICS

Course Description

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

Course Objectives

1. Students will understand the issues concerned with overall development of the agricultural sector in India - Remember
2. Students will be enlightened about the various aspects of agricultural economics such as production economics, farm management climate change and role of policies in agricultural sector development. - Understand
3. Students will apply their knowledge to give suitable policy recommendations for the development of agriculture sector in India. - Apply
4. Students' analytical knowledge about the various problems of the agricultural sector will be enriched. - Analyze
5. Knowledge of agricultural sector will enhance the ability of the students to engage in high quality research

SEMESTER II
DISCIPLINE SPECIFIC ELECTIVE COURSE
AGRICULTURAL ECONOMICS
CREDIT-3

Course Code: MAECO02DSE08

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
2	1	3	30	30	60	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

PROGRAMME OUTCOMES (PSO) relevant to this course

PO (1), PO (2), PO (3), PO (6), PO (7)

PROGRAMME SEPCIFIC OUTCOMES (PSO) relevant to this course

PSO (1) Knowledge of the evolution of various agricultural theories

PSO (2) Knowledge of the functioning of the modern agricultural economy and its measurement using various indicators

COURSE OUTCOMES

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

C01	Explain how agriculture economics has evolved as a major discipline.
C02	Detail the various schools of agriculture economic thought
C03	Examine various factors that determines agricultural growth and development
C04	Compare the functioning of Kerala and Indian agricultural economy
C05	Evaluate the performance of agriculture sector

*Course outcomes based on revised blooms taxonomy

Module – 1

Nature and scope of Agricultural Economics – Role of agriculture in economic development – Theories of agricultural development – Schultz, Mellor, Fei- Ranis and Arthur Lewis, Boserup, Kuznets's Formulations and recent developments – Inter-relationship between agriculture and industry – Terms of trade between agriculture and industry- Agricultural Economics a subject of research.

Essential Reading

T. W. Shultz. 1965. *Transforming traditional Agriculture*. New Haven, London Yale, University Press.

J. W. Mellor. 1966 *The Economics of Agricultural Development*. Bombay: Vora & Co.

W. A. Lewis. 1954 *Economic Development with unlimited supplies of labour*.

Boserup, E. 1993. *Conditions of agricultural growth : The economics of agrarian change under population pressure*, Routledge.

Karl Eicher, and Lawrence Witt. 1964 *Agriculture in Economic Development*. Macgraw hill

O. S. Srivastava. 2010 *Theoretical Issues in Agricultural Economics*. Anmol Publications

Uma Kapila. 2005. *Understanding the Problems of Indian Economy*. Academic Foundation

H. Evan Drummond, Jhon W Goodwin (2004), *Agricultural Economics*, Pearson Education, Delhi

Supplementary Reading

A. Rudra. 1982. *Indian Agricultural Economics-Myth and realities*. New Delhi: Allied publishers.

P.C. Bansil .1977. *Agricultural Problems in India*. Intl Book Distributors. 2 edition.

Anwarul Hoda. 2001. *WTO agreement in Indian Agriculture*. New Delhi: Social Science Press,

Module – II

Agricultural Development in India – Agricultural policy since independence – Institutional and technological changes in Agricultural sector – Impact of agricultural development on environment – Organic farming – Second Green Revolution – Problems of agricultural development – National Commission on Farmers – Recent policy framework in Indian agriculture – Impact of WTO-Agreements on Agriculture – Trade liberalization and agricultural exports – Globalization and Indian agriculture – Agriculture in the context of Covid-19 pandemic.

Essential Reading

G. S. Bhalla. 1995. *Globalization & Agricultural Policy in India*. Indian Journal of Agricultural Economies. Vol. 50, No. 1, January-March

C. H. Hanumantha Rao. 1995. *Liberalization of Agriculture in India*. Indian Journal of Agricultural Economics. Vol. 50, No. 3, July-September.

D. Rudrappan. 2003. *Economic Reforms and Agriculture*. Yojana, Vol. 47, No. 11, November.

C. H. Hanumantha Rao. 2001. *WTO and Viability of Indian Agriculture*. Economic & Political Weekly, September 8-14, 2001, Vol. XXXVL, No. 36

P. K. Singh. 2003. *Reforms in the Agricultural Sector*. Yojana, Vol. 47, No. 11, November.

Supplementary Reading

E.O. Heady. 1961. *Economics of Agricultural Production and Resource use*. Prentice Hall.

C. H. Hanumantha Rao. 1965. *Agricultural Production Function Costs and returns in India*. Tata McGraw Hill.

Websites of Agricultural Statistics, Agricultural Network Information Centre. State Planning Board. Planning Commission.

Current articles related to various modules in EPW. Indian Journal of Agricultural Economics, AERR, Agricultural Situations in India, JRD, Yojana and other referred journals.

Module – III

Economic Decision in Agricultural Production – Production Function in Agriculture and forms of Production Functions-Cobb Douglas, Spill Man – Resource use and efficiency – Systems and types of farming – Agricultural subsidies – Risk and Uncertainty in Agriculture – Crop insurance – Futures trading-Demand and supply of agricultural products – Characteristics of demand and supply – Cobweb theorem – Agricultural prices – Agricultural price policy and food security in India – Agricultural marketing – Market structures and imperfections– Marketing costs – Regulated markets – Marketed and marketable surplus - Present system of agricultural marketing in India – Agricultural credit – Structure and problems of credit in India.

Essential Reading

C. A. Robertson. 1977 *An Introduction to Agricultural Production Economics and Farm Management*

Karl Eicher, and Lawrence Witt. 1964 *Agriculture in Economic Development*. Vora & Co

R. K. Lekhi, and Joginder Singh. 2015 *Agricultural Economics –An Indian perspective* Kalyani Publisher

R. Desai. 2013 *Agricultural Economics*. Himalaya Publishing House

S. A. R. Bilgrami. 2017 *An Introduction to Agricultural Economics*. Himalaya Publishing House.

Supplementary Reading

A Rudra .1982. *Indian Agricultural Economics-Myth and realities*. New Delhi: Allied publishers.

P.C. Bansil. 1977. *Agricultural Problems in India*. Intl Book Distributors. 2 edition.

Module – IV

Agricultural performance of Kerala – Trends in agricultural growth – Land reforms– Shift in cropping pattern – Group farming – Lease land farming – Current problems of the agricultural sector – farm size – productivity relationships – labour absorption and gender issues in agricultural services– Distribution of gains – Technological changes – Indigenous practices – Bio-technological practices – Organic farming practices in the state – Sustainable agriculture – Emerging constraints and prospects of agricultural development in Kerala, since the floods and covid-19 pandemic.

Essential Reading

M. A. Oommen. 2009 *Kerala Economy Since Independence*. Oxford & IBH Publishing Co.

B.A. Prakash 1994(Ed). *Kerala Economy Problems and Prospects*. New Delhi: Sage Publications.

M. A. Oommen (Ed). 1999 *Rethinking Development-Kerala's Development Experience – II*. Institute of Social Science, Concept Publishing Co.

B. A. Prakash. 1999 (Ed). *Kerala's Economic Development, Performance and Problems in the Post Liberalization Period*. New Delhi:Sage Publications.

Karunakaran. N, "Economic and environmental impacts of changing cropping pattern: A Kerala experience", *Indian Economic Journal*, Vol. 60, No. 4, pp:102-124, March 2013

Karunakaran. N," Shift to rubber cultivation and consequences on environment and food security in Kerala", *Journal of Rural Development*, Vol. 32, No. 4, pp:395-408, October-December 2013

Karunakaran. N, *Crop Diversification for Sustainable Agriculture*, Pointer Publishers, Jaipur,India, January, 2015.

Srikumar Chattopadhyay and Richard W Franke .2006.*Causes of concern: land use change, Striving for sustainability, Environmental stress and Democratic initiatives in Kerala*. New Delhi: Concept Publishing Company.

Mohandas.M .2005.*Agricultural Development in Kerala; in Kerala Economy-Trajectories, Challenges and Implications* (Ed), by Rajasenan D and Gerald de Groot.

K.P.Mani .2009.*Cropping pattern in Kerala - spatial inter-temporal analysis. Kerala Economy: Trends during the post-reform period* (Ed), by Rajan K. New Delhi: SerialsPublications.

Karunakaran N and Sadiq MS, "[Socio economic aspect of organic farming practices for improving farmer's income in some locations of Kerala, India](#)", *Bangladesh Journal of Agricultural Research*, Vol. 44, No. 3, pp:401-408, September 2019.

Sinitha Xavier, *Economics of Organic Farming in India* (Ed), Shanlax Publications, Madurai, India, August 2019

Supplementary Reading

Websites of Agricultural Statistics, Agricultural Network Information Centre. State Planning Board.Planning Commission.

Current articles related to various modules in EPW. *Indian Journal of Agricultural Economics*, AERR, JRD, *Agricultural Situations in India*. Yojana and other referred journals.

TEACHING LEARNING STRATEGIES

Flipped classroom
Active learning
Digital learning
Group/Team work

MODE OF TRANSACTION

Hybrid

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60

Continuous Evaluation	40
Seminar	16
Exams (2)	16
Assignment	8

ECONOMICS OF TOURISM

Course Description

The course is divided into four modules. The course intends to familiarize the students with the concept of tourism and also the tourism products and marketing, tourism services and tourism organizations.

Course Objectives

1. To give an overview of concept of tourism and the basics of tourism industry.
2. To discuss the various elements of tourism marketing.

DISCIPLINE SPECIFIC ELECTIVE COURSE

SEMESTER-III

Course Name: Economics of Tourism

CREDIT-3

COURSE CODE – MAECO03DSE09

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
2	1	3	30	30	60	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

CO1	Explain the significance of Tourism Management and its promotion
CO2	Examine the various elements of tourism marketing
CO3	Assess the recent trends in domestic and international tourism.

COURSE CONTENTS

Module 1: Basic Concepts of Tourism

- 1.1 Meaning of tourism
- 1.2 Types of Tourism
- 1.3 Tourism and economic development
- 1.4 Importance of tourism**

Suggested readings

- 1.1 Shashi Prabha Sharma (2004) 'Tourism Education: Principles, Theories and Practices'- Krishka Publications, New Delhi.
- 1.2 Sipra Mukho Padhy (2008) 'Tourism Economics' Ane books.
- 1.3 & 1.4 Donald G Reid (2003) 'Tourism, Globalisation and Development, Responsible Tourism' Plutobooks.

Module 2: Tourism Product and Tourism Marketing

- 2.1 Tourism products: Attractions, Availability, Accessibility and Amenities
- 2.2 Tourism Marketing
- 2.3 Various types of tourism marketing in India
- 2.4 Impact of Information Technology in tourism development

Suggested readings

- 2.1 M.T.Sinclair & Mike Stabler (1997), 'Economics of tourism & Devpt', Routledge, New York.
- 2.2 Lundberg, Stavenca and Krishnamoorthy (1995). Tourism economics. John Wiley and sons.
- 2.3 & 2.4 Sharma K.K(2005) 'Tourism and Development' Saup and Sons, New Delhi.

Module 3: Tourism Services

- 3.1 Hotels - Motels - Resorts - Boating Clubs
- 3.2 Conducted /Organized Tours
- 3.3 Package Tour
- 3.4 Insurance - Guides - Tour Operators - Tour Promoters
- 3.5 Medical Tourism in India

Suggested readings

- 3.1 A.K. Raian and Neelu Jain (2004) 'Dynamics of Tourism- concepts, philosophy and strategies' Krishka Publications.
- 3.2 to 3.5 Abhilash Mallya (2006) 'Wildlife Tourism and Conservations' Gnosis.

Module 4: Performance of Tourism and tourism organizations

- 4.1 Impacts of tourism development in India
- 4.2 Programmes in Tourism Development
- 4.3 Role and Functions: WTO- PATA- WTTC- IHA- Ministry of Tourism, Government of India- ITDC- Federation of Hotel and Restaurants Association of India(FHRAI)

Suggested readings

- 4.1, 4.2 Sharma K.K (2005) 'Tourism and Development' Saup and Sons, New Delhi.
- 4.3 R. K. Goswami (2007) 'Tourism and Environment' Cybertech Publication, New Delhi.

Core Compulsory Readings

- Swain. S.K., and Mishra J.M., (2012), *Tourism Principles and Practices*, Oxford University Press, New Delhi
- Bhatia. A K(2002), *International Tourism Management*, Sterling Publishers, New Delhi
- Biswanath Ghosh(1998), *Tourism and Travel Management*, Vikas, New Delhi,

- Arun Kumar Shankar (1998), *Action Plan and Priorities in tourism development*, Kaniskha, New Delhi.
- Vinukumar. S and Chandrasekhar. K.S (2004), *Sustainable Development and Tourism*.
- Nirmal Kumar. S (1996) , *Problems of Tourism in India -Tourism and Economic Development*, APH, New Delhi.

Core Suggested Readings

- Shashi Prabha Sharma (2004) 'Tourism Education: Principles, Theories and Practices'- Krishka Publications, New Delhi.
- Sipra Mukho Padhy (2008) 'Tourism Economics' Ane books.
- Donald G Reid (2003) 'Tourism, Globalisation and Development, Responsible Tourism' Pluto books.
- M.T.Sinclair& Mike Stabler (1997), 'Economics of tourism &Devpt', Routledge, New York.
- Lundberg, Stavenca and Krishnamoorthy (1995). *Tourism economics*. John Wiley and sons.
- Sharma K.K (2005) 'Tourism and Development' Saup and Sons, New Delhi.
- A.K. Raian and Neelu Jain(2004) 'Dynamics of Tourism- concepts, philosophy and strategies' Krishka Publications.
- Abhilash Mallya (2006) 'Wildlife Tourism and Conservations' Gnosis.
- R.K.Goswami (2007) 'Tourism and Environment' Cybertech Publication, New Delhi.

TEACHING LEARNING STRATEGIES

Lecture method
 Debate/ discussion
 ICT

MODE OF TRANSACTION

- Offline (face-to-face mode)

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

GENDER ECONOMICS

The course is divided into four modules. This course aims to provide a firm understanding of economic and social processes that shape the contemporary global world and their gendered

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

Course Description

PROGRAMME OUTCOMES (PO) relevant to this course

PO1, PO2, PO3, PO4, PO5, PO6, P07

PROGRAMME SEPCIFIC OUTCOMES (PSO) relevant to this course

PSO (1) Knowledge about various concept of gender economics

PSO (2) Identify various gender-based disparities

PSO (3) analyse case studies of gender dimensions of various economic phenomenon

PSO (4) Evaluate the effectiveness of gender-focused economic policies

PSO(5)Attain competitive edge in mastering various theories of gender development

SEMESTER III DISCIPLINE SPECIFIC ELECTIVE COURSE

Course Code: MAECO03DSE10

CREDIT-3

Course Name: GENDER ECONOMICS

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
2	1	3	30	30	60	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

C01	Understand various concept of gender economics and its relevance in understanding economic disparities
C02	Apply theories to analyze the causes and consequences of gender-based inequalities in different sectors (e.g., labor market, education, entrepreneurship).

C03	Analyze case studies or research papers on gender economics to identify underlying factors influencing gender disparities
C04	Evaluate the international developments and planning for development
C05	Evaluate the effectiveness of gender-focused economic policies and programs in reducing gender inequalities.

C06 Assess the impact of cultural and societal norms on gender economics.

C07 Develop innovative solutions and policies to promote gender equality in economic opportunities and outcomes.

*Course outcomes based on revised blooms taxonomy

COURSE CONTENTS

Module 1

1. Introduction to Gender studies (15 hours)

1. 1 Concepts of Gender and Sex
1. 2 Importance of women and gender studies
1. 3 Gender and Economic development – Measures of Gender development

Suggested readings specific to the module.

- 1.1 Evans M and Williams C, (2012) Gender: The Key Concepts, Routledge, London
- 1.2 Evans et al, (2015) The Sage Handbook of Feminist Theory Sage, London
- 1.3 Boserup, Ester(1970), Woman's Role in Economic Development / Ester Boserup; new introduction by Nazneen Kanji, Su Fee Tan and Camilla Toulmin.-- London: Earthscan, (re print-2007)
- 1.4 Benería, L.(2003) Gender, Development & Globalisation. Economics As If All People Mattered. London & NY: Routledge;

Module 2

2. Gender Dynamics (15 hours)

2. 1 Gender dynamics -marriage -reproduction - age structure- mortality - fertility–sex ratio
2. 2 Theories of power and the relations between the psyche and the social
2. 3 Gender representation and rights-gender roles and stereotypes
2. 4 Contemporary issues of gender

Suggested readings specific to the module.

2. 1 Sen,Suvarna ,(2006),Gender and Development, ICFAI University Press, Hyderabad,
2. 2 A.Venkateswarlu, et al. (2013) ,Dimensions of Female Sex Ratio.;Interstate Variations in India ,Serials Publications,New Delhi.
2. 3 UNRISD,(2004) Gender Equality; Striving for Justice in an Unequal World,UNRISD,France
2. 4 Desai,N and M.KRaj (1974), Women and Society in India ,SNDT University ,Mumbai
2. 5 Ahmed S, (2017) Living a Feminist Life, Duke University Press, Durham

Module 3

Gender and Labour Market (15 hours)

3. 1 Gender and Work
3. 2 Gender and Education
3. 3 Feminist movements, LGBTQIA+ rights

3. 4 Role of civil society and Role of N.G.O's

Suggested readings specific to the module.

3.1 Dutta, Nandita and, Sumitra Jha (2014), Women Social Work and Social Welfare, Pacific Books International, New Delhi.

3.2 Wazir, R. (2000), The Gender gap in Basic Education,; NGO's as change Agents, Sage Publications, Delhi

3.3 Kabeer, N. (2003) Gender Mainstreaming in Poverty Eradication and the Millennium Development Goals: a handbook for policy-makers and other stakeholders, London: Commonwealth Secretariat.

3.4 Mohanty C. (2003) Feminism without Borders Decolonizing Theory, Practicing Solidarity, Duke University Press, Durham

3.5 Butler, J (1999) Gender Trouble, Routledge, New York & London

3.6 Agarwal, B. (2016) Gender Challenges (Vol 1, 2 and 3). India: Oxford University Press.

3.7 Benería, L. Berik, G and Floro, M. (2015) Gender, Development and Globalization: Economics as if All people Mattered, London: Routledge. (2nd Edition).

Module 4

Social Security and Rights

(15 hours)

4.1 Measures for gender well being

4.2 Review of legislation- gender quotas and collective action

4.3 National and International policies for gender development

Suggested readings specific to the module.

4.1 Visvanathan, N. et.al. (2012) The Women, Gender and Development Reader, London: Zed Books.

4.2 Selwyn, B. (2014) The Global Development Crisis, Cambridge: Polity Press.

4.3 Stiglitz, J. (2015) The Great Divide. Unequal Societies and What We Can Do About Them, London: Penguin.

4.4 Walby, S. (2009) Globalisation and inequalities: Complexity and contested modernities. London: Sage Publications Ltd.

4.5 Govt. of India (1974), Towards equality-Report of the committee on the status of women in India, Dept of Social Welfare, Ministry of Education and Social Welfare, New Delhi.

4.6 Govt. of India (2009), Gender Equality and Women Empowerment in India, National Family Health Survey 2005-06 (NFHS-3), IIPS, Mumbai

4.7 Jaggar, A. (2014) Gender and Global Justice, Bristol: Polity

4.8 Marchand, M. and Runyan, A. (2011) Gender and Global Restructuring, second edition London: Routledge.

4.9 Milanovic, B. (2016) Global Inequality: A New Approach for the Age of Globalization, Harvard: Harvard University Press

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

- Sen, Amartya. (1990), "More than 100 million women are missing" New York Review of Books, vol. 37, No. 20, 1990.
- Dutta, Nandita and, Sumitra Jha (2014), Women and Agricultural Development, Pacific Book, New Delhi.
- Dutta, Nandita and, Sumitra Jha (2014), Women and Rural Development, Pacific Books Internat, Delhi
- Harilal, K.N., Kanji, N., Jeyaranjan, J., Eapen, M. and Swaminathan, P (2006) Power in Global Value Chain; Implications of cashew nut industry in India, IIED
- Hemmings C, Why Stories Matter: (2011) The Political Grammar of Feminist Theory, Duke University Press, Durham
- Hill Collins P and Bilge S, (2016) Intersectionality, Polity, London
- ILO, (2002) Women and Men in the Informal Economy; A statistical Picture, ILO
- Jitendra Ahirrao (2013), Entrepreneurship and Rural Women in India, New Century Publications, New Delhi.
- Krishna Raj .M, Sudarshan.R.M, and Shariff.A, (1999), Gender, Population and Development, Oxford University Press, New Delhi
- Pal, Manoranjan et al (Ed) (2011), Health, Nutritional Status and Role of women in India, Oxford University Press, New Delhi.
- Sen, Sujatha, (2012) Gender studies, Dorling Kindersely (India) Pvt. Ltd, New Delhi.
- Seth .M, (2000) Women and Development; The Indian Experience, Sage Publications, New Delhi
- Srinivasa.K, and A. Shroff (1998) India Towards population and Development Goals, OUP, New Delhi
- Various issues of Economic and Political Weekly. (for e.g. John Mary .E. (1996) "Gender and Development in India EPW, 31(47), PP 3071-77)
- Weigman R, (2012) Object Lessons, Duke University Press, Durham

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

- Foucault M (1990) The History of Sexuality Vol 1 Penguin, Houndsmills
- Mirchandani, K. (2012) Phone Clones. Authenticity Work in the Transnational Service Economy, Ithaca: ILR Press.
- Butler J, (1997) the Psychic Life of Power, Stanford University Press, Stanford
- Chant, S. (ed.) (2010) International Handbook of Gender and Poverty: Concepts, Research, Policy, Cheltenham: Edward Elgar.
- Cook, S. and Kabeer, N. (2010) Social Protection as Development Strategy, London: Routledge.
- Cornwall, A., Harrison, E. & Whitehead, A. (eds) (2007) Feminisms in Development: contradictions, contestations, and challenges, London: Zed Books.
- Cornwall, A., Edstrom, J. and Greig, A. eds. (2011) Men and Development: Politicising Masculinities, London: Zed Books.
- Devaki, J. and Elson, D. (2011) Harvesting Feminist Knowledge for Public Policy, IDRC, London: Sage
- Eadie, Jo (ed) (2004) Sexuality. The Essential Glossary, publisher Hodder Education
- Escobar, A. (2011) Encountering Development: The Making and Unmaking of the Third World, Princeton University Press

CO 1	S	S	M	S	S	S	S	S	S	M	W	M
CO 2	S	S	M	S	S	S	S	S	S	M	W	M
CO 3	S	S	M	S	S	S	S	S	S	M	W	M
CO 4	S	S	M	S	S	S	S	S	S	M	W	M
CO 5	S	S	M	S	S	S	S	S	S	M	W	M
CO 6	S	S	M	S	S	S	S	S	S	M	W	M
CO 7	S	S	M	S	S	S	S	S	S	M	W	M

***S-Strong correlation, M-Moderate correlation; W- Weak correlation, N – No correlation**

INSTITUTIONAL ECONOMICS

Course Description

Institutional Economics offers an in-depth exploration of the role of institutions in shaping economic behavior, performance, and development. This course provides students with a comprehensive understanding of how formal and informal rules, norms, and organizations influence economic activities at both micro and macro levels. Drawing on a rich blend of economic theory, historical analysis, and contemporary case studies, this course equips students with the tools to critically examine the institutions that underpin economic systems.

On the successful completion of the course, the student will be able to

Course Objectives

1. Ability to use the theory of institutions in analysis of the institutional environment of different settings.
2. Capable of using game theory to analyse institutions.
3. Ability to use instruments of new institutional economics to analyse particular institutions.
4. Instruments of new institutional economics to analyse contracts.
5. To use instruments of new institutional economics to analyse relations between firms, individuals and state.

SEMESTER III DISCIPLINE SPECIFIC ELECTIVE COURSE

INSTITUTIONAL ECONOMICS

Course Code: MAECO03DSE11

Credit			Teaching Hours			Assessment	
L/T	P/I	Total	L/T	P/I	Total	CE	ESE
2	1	3	30	30	60	40	60

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

PROGRAMME OUTCOMES (PSO) relevant to this course

PO (1), PO (2), PO (3), PO (4), PO (5), PO (6), PO (7)

Module – 1

Institutional Economics – Historical Perspective TB Veblen: The theory of the Leisure Class- Informal institutions and systems-System of industrial planning-Jungian Archetypes and social psychology-R Commons and J.K Galbriath- Legal Institutions, Scientific investigation method, New School for Social Research, Origin of agent –based theory. G. Myrdal ideas related to institution and modernization. Religious institutions – Max weber’s concepts – Protestant and capitalism. Kenneth Boulding: The Three-fold taxonomy of social organization. Institutional analysis in the works of classical economists -"old" institutional economics (Veblen and Commons).

Module – II

New Institutional Economics - Interaction on formal and informal institutions. Role of traditional/social norms in shaping economic behavior, Law and markets -property rights and institutional change -interrelationship between legal and economic processes -The problem of social cost and externalities -transaction cost analysis - theory of property rights -theory of contracts. Economic exchange in modern society. Laws, and informal institutions, norms and culture; individual and group behaviour, Behaviors including contracts

Module – III

Markets Firms and State Market as organization -market organization as a result of market cooperation -incentive to integrate -limits to integrate -institutional models in neoclassical theory -role of political institutions -political markets.

Module – IV

Institutional Change Regulation in a dynamic setting -regulating natural resources: the evolution of perverse property rights; institutional change in a representative democracy -state failure - rational individuals versus social dilemmas.

Essential Reading

- Douglass C North -Institutions, Institutional Change and Economic Performance, Cambridge University Press, 1990
- Malcolm Rutherford -Institutions in Economics: the Old and the New Institutionalism, Cambridge University Press, 1996.
- Ronald H Coase -The Firm, the Market and the Law, University of Chicago Press, 1998.
 - Thrainn Eggertsson -Economic Behavior and Institutions, Cambridge University Press, 1990.
- Commons, J. R. 1990, Institutional Economics, Transaction Publishers,
- London Cyert, R.M. and March, J.G., 1963, A Behavioral Theory of the Firm,
- Englewood Cliffs, New Jersey. North, D.C. 1991, Institutions, Institutional Change and Economic Performance, Cambridge University Press, Cambridge, USA.
- North, D.C. 1992, Transaction Costs, Institutions and Economic Performance, Occasional Papers 30, International Center for Economic Growth, San Francisco.
- Scherer, F.M. 1980, Industrial Market Structure and Economic Performance

TEACHING LEARNING STRATEGIES

Flipped classroom
Active learning
Digital learning
Group/Team work
MODE OF TRANSACTION
Hybrid

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Seminar	16
Exams (2)	16
Assignment	8

OPERATIONS RESEARCH FOR ECONOMIC ANALYSIS

Course Description

The course is divided into four modules which cover history and development of OR, OR models - Linear Programming Problem, Transportation and assignment problem, decision theory, game theory and network techniques.

Course Objectives

3. Exposes students to some of the most fundamental concepts and algorithms in the field of Linear and Discrete Optimization.
4. To develop skill in effective LP model formulation and application.
5. To discuss and model various business problems where optimization is required.
6. To enables the students to familiarize with Operation Research techniques and its applications in managerial decision making.

SEMESTER IV
DISCIPLINE SPECIFIC ELECTIVE COURSE

CREDIT-3

Course Code: MAECO04DSE12

Course Name: OPERATIONS RESEARCH FOR ECONOMIC ANALYSIS

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
2	1	3	30	30	60	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

CO Number	CO Statement
CO 1	Explain the meaning and scope of operations research
CO 2	Apply the knowledge of linear programming concepts to formulate real life problems
CO 3	Describe the basic concepts of game theory and demonstrate the formulations of real world problems as a game theory model
CO 4	Apply and analyse key concepts of transportation and assignment problem
CO 5	Able to model network problems such as CPM, PERT and solve them with the algorithms discussed in the course

COURSE CONTENTS

Module 1

Introduction to Operations Research:

1. 1 History and development of OR
1. 2 Meaning and scope
1. 3 OR models and their applications

Linear programming problems:

1. 4 Formulation of LPP
1. 5 Graphical solution

1. 6 Simplex procedure for maximization and minimization

1. 7 Duality concept-solution of dual problem- Economic interpretation of dual problems

Suggested readings

1.1 to 1.7 J.K Sharma. 1997. *Operations Research- Theory and Applications*.

Module 2

Transportation Model:

2.1 Mathematical formulation- general structure of the problem

2.2 Methods to obtain Initial Basic Feasible Solution (IBFS) - NWCR and VAM

2.3 MODI method for testing optimality solution of balanced and unbalanced problems.

Assignment Model:

- 2.4 Method for solving assignment problems
- 2.5 Balanced and unbalanced assignment problems
- 2.6 Maximization problems.

Suggested readings

- 2. 1 to 2.3 J.K Sharma. 1997. *Operations Research- Theory and Applications*.
- 2. 4 to 2.6 William J. Baumol. 1999. *Economic Theory and Operations Analysis*. New Delhi: Prentice Hall of India.

Module 3

Decision Theory:

- 3.1 Introduction- basic concepts- pay off table- opportunity loss or regret table
- 3.2 Decision rule - decision making under certainty, uncertainty and risk
- 3.3 Laplace criterion- maximax, minimax, maximin- Harwicz α criterion
- 3.4 Expected Opportunity Loss- EMV criterion - Expected Value of Perfect Information (EVPI)
- 3.5 Bayesian decision theory
- 3.6 Decision tree

Game theory:

- 3.7 Introduction- meaning- basic concepts
- 3.8 Types of game
- 3.9 Solution to pure strategy games- saddle point theorem
- 3.10 Methods for solving mixed strategy game problem

Suggested readings

- 3. 1 to 3.6 Kanthi Swarup, Gupta and Man Mohan. *Operations Research*. Sultan Chand & Sons
- 3.7 to 3.10 William J. Baumol. 1999. *Economic Theory and Operations Analysis*. New Delhi: Prentice Hall of India.

Module 4

Network Techniques:

- 4.1 Basic concepts- construction of networks
- 4.2 Slack- float
- 4.3 PERT and CPM
- 4.4 Time cost- trade off analysis
- 4.5 Resource allocation and scheduling
- 4.6 Resource leveling- resource smoothing

Suggested readings

- 4.1, 4.2 & 4.3 Kanthi Swarup, Gupta and Man Mohan. *Operations Research*. Sultan Chand & Sons.
- 4.4, 4.5 & 4.6 J.K Sharma. 1997. *Operations Research- Theory and Applications*.

Core Compulsory Readings

- J.K Sharma. 1997. *Operations Research- Theory and Applications*.
- William J. Baumol. 1999. *Economic Theory and Operations Analysis*. New Delhi: Prentice Hall of India.
- Anderson, Sweeney & Williams 2007, *An Introduction to Management Science- Quantitative approaches to Decision Making*. Thomson- South Western.
- Rao S.S. *Optimisation Theory and Applications*. New Age International.
- Taha.H.A. *Operations Research- An Introduction*. Mc.Millan.

- Kanthi Swarup, Gupta and Man Mohan. *Operations Research*. Sultan Chand & Sons

Core Suggested Readings

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

TEACHING LEARNING STRATEGIES

Lecture method

Problem solving method

MOODLE

ICT

MODE OF TRANSACTION

Offline (face-to-face mode)/ online

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

Sample Questions to test Outcomes.

1. Discuss the development of OR
2. Write down the dual of the following problem
Maximize $Z=X1+6X2$

Subject to $X1+3X2 \geq 2$

$X1+3X2 \leq 3$

$X1, X2 \geq 0$

3. Explain reducing the game problem to LPP
4. Solve the transportation problem by using Vogel’s method and
5. check the solution for optimality.

Destinations

Source: 1 2 3 4 Supply

21	16	15	3
17	18	14	23

32	27	18	41
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Demand 6 10 12 15

6. Solve the network problem by using CPM method

Activity	Time duration
1-2	4
1-3	1
2-4	1
3-4	1
3-5	6
4-9	5
5-6	4
5-7	8
6-8	1
7-8	2
8-10	5
9-10	7

Mapping of COs with POs & PSOs

Course Outcomes	Programme Outcomes					Programme Specific Outcomes				
	PO 1	PO 2	PO 3	PO 4	PO 5	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO 1	N	M	S	N	M	M	S	W	M	M
CO 2	M	M	S	S	M	S	S	S	S	M
CO 3	M	M	S	S	M	S	S	S	S	M
CO 4	S	S	S	S	S	S	S	M	S	S
CO 5	N	M	S	N	M	M	S	W	M	M

*S-Strong correlation, M-Moderate correlation; W- Weak correlation, N – No correlation

URBAN AND REGIONAL ECONOMICS

The Urban and Regional Economics course introduces the relevance of space in economic systems. The course attempts to answer the question of location in economic analysis. Multidisciplinary in nature, the course offers a brief overview of the pressing themes in regional economics such as firm, housing, transportation, local governance and policy. While it highlights the urban transformation of the contemporary world, it also introduces the themes of sustainability, inclusion and planning for cities.

Course Objectives

1. Explain the importance of space in economic outcomes
2. Examine the evolution of cities
3. Analyse the major reasons concerning human settlements
4. Understand the themes of sustainability, inclusion and planning for cities
5. Evaluate the rise of cities using case studies

SEMESTER IV

DISCIPLINE SPECIFIC ELECTIVE COURSE

CREDIT-3

Course Code: MAECO04DSE13

Course Name Urban and Regional Economics

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
2	1	3	30	30	60	60	40	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

PROGRAMME OUTCOMES (PSO) relevant to this course

PO (1), PO (3), PO (4), PO (6) PO (7)

PROGRAMME SEPCIFIC OUTCOMES (PSO) relevant to this course

PSO (1) Knowledge of the role of space in economic activity and ways to make it sustainable and equitable

PSO (2) Ability to examine and evaluate todays urban transformation

COURSE OUTCOMES

Course Learning Outcomes:

C01	Explain the relevance of spatial dimensions of economic activity
C02	Examine the drivers of human settlements
C03	Analyse and measure the growth of cities
C04	Examine how far cities are sustainable and inclusive
C05	Explain the role of financing and planning in urban development

*Course outcomes based on revised blooms taxonomy

COURSE CONTENTS

Module 1 Introduction

(7 hours)

1.1 Role of Space

1.2 Defining regional economics and regions

1.3 Evolution of the urban/cities

1.4 Regional Growth - Benefits and costs

Suggested readings specific to the module.

1.1 [An Introduction to Regional Economics](#), Edgar M. Hoover and Frank Giarratani

1.2 Lectures on Urban Economics, Jan Brueckner

1.3 Urban Economics Arthur O'Sullivan, 5th edition 2002 – Chapter 1-3

1.4 Fujita & Thisse. 1996. 'Economics of Agglomeration,' Journal of the Japanese and International Economies, Volume 10, Issue 4, 1996, Pages 339-378, <https://doi.org/10.1006/jjie.1996.0021>

Module 2 Location

(7 hours)

2.1 The economics of location - Drivers of Location

2.2 Production Externalities

2.3 Land Use and Zoning

2.4 Transportation

Suggested readings specific to the module.

2.1 Krugman, P. (1998). Space: The Final Frontier. *The Journal of Economic Perspectives*, 12(2), 161–174. <https://www.jstor.org/stable/2646968>

2.2 Lin, “Geography, history, economies of density, and the location of cities,” *Business Review* (2012). <https://jlin.org/papers/Lin-GHEDLC.pdf>

2.3 Lectures on Urban Economics, Jan Brueckner

2.4 Urban Economics Arthur O'Sullivan, 5th edition 2002

Module 3

(8 hours)

3.1 Housing, Real Estate, Segregation and Policies

3.2 City growth

3.3 Local Governance, Development and Financing

3.4 Cities for All: Bridging the Urban Divide

Suggested readings specific to the module.

3.1 Lectures on Urban Economics, Jan Brueckner.

3.2 Urban Economics Arthur O'Sullivan, 5th edition 2002

3.3 Serageldin, et al. (2008). Municipal financing and urban development (No. 3). United Nations Human Settlements Programme. <https://unhabitat.org/sites/default/files/download-manager-files/Municipal%20Finance%20and%20Urban%20Development.pdf>

3.4 State of the World's Cities 2010/2011- Cities for All: Bridging the Urban Divide. Abridged version. 2010. https://unhabitat.org/sites/default/files/2021/10/11143016_alt.pdf

Module 4 –

(8 hours)

4.1 Economic Geography of density, distance, and division

4.2 Future of Cities

4.3 Sustainable cities

4.4 Urban Planning

Suggested readings specific to the module.

4.1 World Bank. 2009. Reshaping Economic Geography, World Development Report. <http://hdl.handle.net/10986/5991>

4.2 UNHABITAT. 2022. Key Findings and Messages – World Cities Report, Envisaging the future of Cities. <https://unhabitat.org/wcr/>

4.3 Cohen, S (2018). The sustainable city. Columbia university press. <http://ndl.ethernet.edu.et/bitstream/123456789/46877/1/The%20Sustainable%20City.pdf>

4.4 P Hall Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the 20th Century (Wiley Blackwell, 2012)

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

- [An Introduction to Regional Economics](#), Edgar M. Hoover and Frank Giarratani
- Lectures on Urban Economics, Jan Brueckner
- Urban Economics Arthur O'Sullivan, 5th edition 2002

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

- <https://researchrepository.wvu.edu/cgi/viewcontent.cgi?article=1003&context=rri-web-book>
- <http://site.ebrary.com/lib/ucla/docDetail.action?docID=10509210>
- https://urbaneconomics.org/workshops/lectures2020/slides/UEA_Lectures_Duranton.pdf
- <https://www.coursera.org/lecture/iglus/case-study-planning-and-designing-indias-capital-city-5re2e>
- <https://urban-regeneration.worldbank.org/node/51>
- Governing India's Metropolises. 2009. Joel Ruet, Stephanie Tawa Lama Rewal. Routledge.

TEACHING LEARNING STRATEGIES

Flipped classroom
Active learning
Digital learning
Group/Team work

MODE OF TRANSACTION

- Hybrid

ASSESSMENT RUBRICS Marks

End Semester Evaluation	60
Continuous Evaluation	40
Seminar	16
Exams (2)	16
Assignment	8

Sample Questions to test Outcomes.

1. Examine the concept of space and scales and its relevance in economics
2. Explain the foundation stones of Regional Economics
3. Evaluate the dimensions of development
4. Analyze the development trajectory of Bangalore and its imperatives
5. Discuss the various costs and benefits of cities
6. Examine the various financing methods of city development

Mapping of Course Outcomes to PSOs/POs

	PSO1	PSO2	PO1	PO3	PO4	PO6	PO7
CO1	3	2	2	3	1	2	2
CO2	2	3	3	3	3	3	3
CO3	2	3	3	3	2	2	2
CO4	3	3	3	3	3	3	3
CO5	2	3	3	3	3	3	3

ENTREPRENEURIAL ECONOMICS

Course Description

Entrepreneurial Economics is a dynamic and comprehensive course designed to equip students with the essential knowledge and skills to understand the intersection of entrepreneurship and economics. This course goes beyond traditional economic theories to explore the critical role that entrepreneurs play in shaping and driving economic development, innovation, and sustainability. On the successful completion of the course, the student will be able to

Course Objectives

- 10 Start own business as Entrepreneur
- 11 Enabling the students to find career opportunities in business.
- 12 To enable the students to gain knowledge and skills needed to run a business successfully.

SEMESTER IV

DISCIPLINE SPECIFIC ELECTIVE COURSE

CREDIT-3

Course Code: MAECO04DSE14

Credit			Teaching Hours			Assessment	
L/T	P/I	Total	L/T	P/I	Total	CE	ESE
2	1	3	30	30	60	40	60

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

PROGRAMME OUTCOMES (PSO) relevant to this course

PO (1), PO (2), PO (3), PO (4), PO (5), PO (6), PO (7)

Module – I

Entrepreneur and Entrepreneurship – Meaning, Definitions, Evolution, types- Characteristics, qualities, functions of entrepreneur- Distinction between entrepreneur and manager, Distinction between entrepreneur and intrapreneur- Role and importance of Entrepreneurship in economic development-Factors influencing entrepreneurship’- Psychological, social, Economic and Environmental.

Module – II

New generations of entrepreneurship viz. social, Health, Tourism and Women entrepreneurship; Barriers to entrepreneurship. -Launching Entrepreneurial Ventures - Generation of ideas: methods and process - sources of ideas - screening process- Assessing Opportunities-Challenges, pitfalls and critical factors of new venture

Module – III

Business Plan- New Ventures: Steps involved in setting up a Business – identifying, selecting a Good Business opportunity, Market Survey and Research, Techno-Economic Feasibility Assessment- Role of Innovation & Creativity: Innovation- Meaning and importance of innovation; Types of innovation; Sources of innovation; Conditions for effective innovation at Organization level- Creativity: Concept and process of creativity; role and importance of creativity and mental blocks to creativity; branding, trademarks, patents, copyrights, and registered design protection-Methods of protecting innovation and creativity- Media and promotion

Module – IV

Business and Entrepreneurial development- Assistance to an entrepreneur-Industrial Park-Special Economic Zone- Financial assistance by different agencies-License, Environmental Clearance, e-tender process, Excise exemptions and concession, Exemption from income tax - Quality Standards with special reference to ISO - Determining and acquiring required resources for financing- Entrepreneurship development programme (EDP) in India– Objectives, Phases, and inputs of EDP; - Government initiatives for entrepreneurship – Make in India, Start-up India, MUDRA etc

Essential Reading

- Donald F Kuratko, “Entrepreneurship – Theory, Process and Practice”, 9 th Edition, CengageLearning, 2014.
- Khanka. S.S., “Entrepreneurial Development” S.Chand & Co. Ltd., Ram Nagar, New Delhi, 2013.
- Kuratko and Rao, Entrepreneurship: A South Asian Perspective; Ferrell, Fraedrich, Farrell, BusinessEthics, Cengage Learning
- Entrepreneurship, R. Saibaba, Kalyani Publishers, New Delhi.
- Entrepreneurship Development and Business Ethics, Sanjeet Sharma – V.K. Global Pvt. Ltd., NewDelhi
- SS Khanka, Entrepreneurial Development, S. Chand & Co, Delhi
- Desai, Vasant. Dynamics of Entrepreneurial Development and Management. Mumbai, HimalayaPublishing House
- Plsek, Paul E. Creativity, Innovation and Quality (Eastern Economic Edition), New Delhi:Prentice-Hall of India. ISBN-81-203-1690-8.
- Singh, Nagendra P. Emerging Trends in Entrepreneurship Development. New Delhi: ASEED.
- Entrepreneurship Development and Business Ethics - M K Nabi, K C Rout, Vrinda Publications (P)Ltd
- Robert Hisrich and Michael Peters, Entrepreneurship, Tata Mc Graw– Hill Vasant Desai, Entrepreneurship
- Marc J Dollinger, Entrepreneurship – Strategies and Resources, Pearson Education
- Venkateshwara Rao and Udai Pareek,(Eds)Developing Entrepreneurship-A Handbook
- Ravi J. Mathai, Rural Entrepreneurship A Framework in Development Entrepreneurship – A handbook

TEACHING LEARNING STRATEGIES

Flipped classroom
Active learning
Digital learning
Group/Team work

MODE OF TRANSACTION

Hybrid

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Seminar	16

Exams (2)	16
Assignment	8

LABOUR ECONOMICS

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 Objectives

On the successful completion of the course, the student will be able to attain

1. Students would understand the conceptual clarity on various concepts and measurements related to labour market, employment and unemployment, labour force participate rate, human capital investment and wages.
2. Understand the importance of labour on development.
3. Relates the basic economic theory and principles to current labour issues and evaluate related public policy.
4. Comprehend the types of unemployment and reasons for unemployment in developing countries.
5. Develop research skills in the field of labour economics.

SEMESTER IV DISCIPLINE SPECIFIC ELECTIVE COURSE

Course Code: MAECO04DSE15

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	total
2	1	3	30	30	60	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

PROGRAMME OUTCOMES (PSO) relevant to this course

PO (1), PO (2), PO (3), PO (4), PO (5), PO (6), PO (7)

Module – 1

Labour and Workforce: Concepts, types and measurement of labour force, workforce participation rates, employment and unemployment, wages, labour market.

Module – II

Labour Supply: Choice between work and leisure (work-leisure trade off), labour supply schedule, backward bending labour supply curve, income effect, substitution effect, factors affecting labour supply.

Module – III

Labour Demand and Equilibrium: Labour demand function, wage elasticity of demand for labour, labour market equilibrium -Investment in Education: Theory of human capital, spending on education, returns to education, education and training.

Module – IV

Features of labour market in India: Employment and unemployment scenario, labour migration, minimum wages, labour laws in India.

Essential Reading

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

TEACHING LEARNING STRATEGIES

Flipped classroom
Active learning
Digital learning
Group/Team work

MODE OF TRANSACTION

Hybrid

ASSESSMENT RUBRICS

Marks

End Semester Evaluation	60
Continuous Evaluation	40

Seminar	16
Exams (2)	16
Assignment	8

ECONOMICS OF NATURAL RESOURCES
Course Description

The course is divided into four modules. The course intends to familiarize the students with the concept of natural resource economics, economics of biodiversity, Natural resource protection and management and natural resource protection and policy.

Course Objectives

1. To study the various instruments for environmental protection programme that can augment environmental quality at the local, national and international level.
2. To examine the role of various state and non-state agencies in environmental protection leading to quality environment.
3. To provide the students with a basic skills and knowledge in the natural resource management of a country.

SEMESTER-II
MULTI- DISCIPLINARY COURSE
Course Name: Economics of Natural Resources
CREDIT-2
COURSE CODE –MAECO02MDC01

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
1	1	2	15	30	45	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

CO1	To gain better knowledge about the economics of extraction of natural resources
CO2	To study the economics of biodiversity and need for protecting biodiversity
CO3	To study about various methods and instruments of protecting natural resources and environment

CO4	To study the role of different agencies in natural resource protection and management.
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COURSE CONTENTS

Module 1: Natural resource economics- meaning and significance

- 1.1 Resource taxonomy
- 1.2 Economics of managing renewable and non-renewable resources
- 1.3 Water resources in India-issues and concerns
- 1.4 Water pollution
- 1.5 Water ethics

Suggested readings

- 1.1 Tom, Tietan Berg. 2004. *Environmental and Natural resource Economics*. Pearson
- 1.2 Prakash, Vohra, and Ragesh, Mehta. 2007. *Environmental Economics*. New Delhi: Common wealth publishers.
- 1.3 Misra, SP, and Pandey, S N. 2009. *Essential Environmental Studies*. Ane Book Pvt.Ltd
- 1.4 Saxeena, H M. 2006. *Environmental Studies*. Rawat Publications.
- 1.5 Eban, S Goodstein. 2002. *Economics and the environment*. John Wiley and sons.

Module 2: Economics of Biodiversity

- 2.1 Importance of Biodiversity and types of Biodiversity
- 2.2 Biodiversity-magnitude and levels
- 2.3 Value of bio diversity
- 2.4 Threats to biodiversity

Suggested readings

- 2.1 Tom, Tietan Berg. 2004. *Environmental and Natural resource Economics*. Pearson.
- 2.2 Aravindkumar. 2004. *Environment and Health*. New Delhi :APH Publishing Company.
- 2.3 Prakash, Vohra, and Ragesh, Mehta. 2007. *Environmental Economics*. New Delhi: Common wealth publishers.
- 2.4 Misra, SP, and Pandey, S N. 2009. *Essential Environmental Studies*. Ane Book Pvt.Ltd

Module 3: Natural resource protection and management

- 3.1 Environment Impact Assessment (EIA)
- 3.2 Environmental Planning and Management
- 3.3 Need for environmental valuation
- 3.4 Market based valuation,
- 3.5 Use of surrogate market
- 3.6 Use of standard preference method
- 3.7 Limitation of environmental valuation

Suggested readings

- 3.1** Keohane and Olmstead (2016), An Economic Perspective on Environmental Policy and Resource Management: An introduction, RFF Reader.
- 3.2** Kenneth J. Arrow, Maureen L. Cropper, George C. Eads, Robert W. Hahn, Lester B. Lave, Roger G. No11, Paul R. Portney, Milton Russell, Richard Schmalensee, V. Kerry Smith, and Robert N. Stains(1996) Is there a role for

benefit-cost analysis in Environmental, health, and safety regulation?
Science, 272: 220-222.

3.3 Kolstad (2000), Environmental Economics , Oxford University Press,
2000), Ch.3 (pp.53-59) , Kolstad, Ch.17 (pp.344-350)

3.4 Nick Hanley Jason F. Shogren Ben White (1997) Environmental Economics
in Theory and Practice, Springer

3.5 Chay, K. and Greenstone, M. “Does Air Quality Matter? Evidence from
the Housing Market” Journal of Political Economy, April 2005, 376-424
(4) Travel Cost Method

3.6 King and Marzotta(2004)
Ecosystem Valuation,
[http://www.ecosystemvaluation.org/travel_costs.
htm](http://www.ecosystemvaluation.org/travel_costs.htm)

3.7 Krupnick, A. and Juha Siikamaki(2007). “How people value what
nature provides.” Resources. Spring 2007: 14-16.
http://www.rff.org/rff/News/Features/upload/28493_1.pdf

Module 4: Natural Resource protection and policy:

4.1 Need for Natural resource protection

4.2 Instruments for environmental protection

4.3 Command and control

4.4 Market based new tools-education, information and voluntary measures

4.5 Direct economic instruments-pollution fee and polluter pay principle, deposit refund
system, taxes and subsidies

4.6 Role of various sectors in environmental Protection-Government, public, private,
Cooperative, NGO's etc.

Suggested readings

4.1 Tom, Tietan Berg. 2004. *Environmental and Natural resource Economics*. Pearson.

4.2 Aravindkumar. 2004. *Environment and Health*. New Delhi :APH Publishing Company.

4.3 Prakash, Vohra, and Ragesh, Mehta. 2007. *Environmental Economics*. New Delhi: Common
wealth publishers.

4.4 Misra, SP, and Pandey, S N. 2009.*Essential Environmental Studies*. Ane Book Pvt.Ltd

4.5 Saxeena, H M. 2006. *Environmental Studies*.RawatPubliations.

4.6 Eban, S Goodstein. 2002. *Economics and the environment*. John wiley and sons.

Core Compulsory Readings

- Tom, Tietan Berg. 2004. *Environmental and Natural resource Economics*. Pearson.
- Prakash, Vohra, and Ragesh, Mehta. 2007. *Environmental Economics*. New Delhi:
Common wealth publishers.
- Charles, D Kolstad. 2000. *Environmental Economics*. Oxford University Press.

- Nick, Hanley, Jason, F Shogren and Ben, White. 2002. *Environmental Economics in Theory and Practice*. Newyork: Palgrave
- Eban, S Goodstein. 2002. *Economics and the environment*. John wiley and sons.
- Misra, SP, and Pandy, S N. 2009.*Essential Environmental Studies*. Ane Book Pvt.Ltd
- K G Mailer and J Vincent: Handbook of Environmental Economics, Elsevier (2005)
- Manusinghe Mohan(2009)Sustainable Development in practice, Cambridge University Press,cambrdige
- Subashini, Muthukrishanan. 2015. *Environmental Economics*, PHI learning Pvt.Ltd.
- Russel, S, Clifford. 2001. *Applying Economics to environment*. Oxford University Press.
- Aravindkumar. 2004. Environment and Health. New Delhi :APH Publishing Company.
- Saxeena, H M. 2006. Environmental Studies. Rawat PUBLIATIONS.

Core Suggested Readings

- Barbier, Edward B. 1998*The Economics of Environment and Development*. Selected Essays, Edward Elgar, Cheltenham
- Tom, Tietenberg. 2011*Environmental and Natural Resource Economics*. New York: HarperCollins Publishers.
- Ian, Goldin, and L, 1995Alan Winters. *The Economics of Sustainable Development*, New York: Cambridge University Press.
- Sterner, and Coria.2011. *Policy Instruments for Environmental and Resource Management*. Francis and Taylor.
- David, Pearce, and Dominic,1994.Moran.*The Economic Value of Biodiversity*, London: Earth Scan Publications Ltd.
- Subashini, Muthukrishanan. 2015. *Environmental Economics*, PHI learning Pvt.Ltd.
- K G Mailer and J Vincent: Handbook of Environmental Economics, Elsevier (2005)
- Phaneuf and Requate: 2017.A Course in Environmental Economics: Theory, Policy and Practice, Cambridge University Press
- Freeman, Herriges and Kling: 2014.The Measurement of Environmental and Resource Values: Theory and Methods, 3rd ed. RFF Press/Routledge

TEACHING LEARNING STRATEGIES

Lecture method

Discussion/ Debate

ICT

MODE OF TRANSACTION

- Offline (face-to-face mode)

ASSESSMENT RUBRICS

Marks

End Semester Evaluation	60
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Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

Teaching Learning Strategies

A. Continuous Internal Assessment (CIA)

1. Internal Test – Descriptive and analytical type of questions and problems are involved.
2. Book review – every student to review a seminal work on any topic relevant to the course and submit a report
3. Seminar Presentation -with scope for detailed discussion and argument on the theme
4. Assignments – Fundamental topics in the concerned area in the light of burning issues relating to the subject shall be presented and discussed by the learner in the class
5. Online presentations-students may be asked to prepare online teaching and learning materials so as to enable them to be trained in flipped class room mode of teaching

KERALA ECONOMY

Course Description

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

Course Objectives

1. The course aims to provide a better orientation and a deeper understanding about the development issues of Kerala economy.
2. To know more about the dimension of changes, and policies with respect to the development of Kerala economy.

**MULTI DISCIPLINARY COURSE
SEMESTER –II
COURSE CODE – MAECO02MDC02
CREDIT-2
Course Name: KERALA ECONOMY**

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
1	1	2	15	30	45	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

CO1	Understand the dimension of changes, issues and policies with respect to development of Kerala Economy.
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COURSE CONTENTS

Module 1

- 1.1 A profile of Kerala Economy since its formation
- 1.2 Model of Development & Sustainability of the model
- 1.3 Structural changes in Kerala Economy
- 1.4 Recent trends in economic Indicators
- 1.5 Demographic changes – ageing – health —poverty- unemployment

Suggested readings

- 1.1, 1.2 K.K George. 1993. Limits to Kerala Model of Development: an analysis of fiscal crisis and its implications. Trivandrum:CDS.
- 1.3, 1.4 Parayil, Govindan. 2000. Kerala: The Development Experience: Reflections on Sustainability And Replicability. Zed Books.
- 1.5 Frank, Richard and T.M.ThomasIssac.2000.Local democracy and Development: people's Plan for decentralized planning in Kerala.

Module 2

- 2.1 Migration--Labour migration-changing pattern of migration in Kerala-new trends- Policies
- 2.2 ICT and development
- 2.3 Tourism
- 2.4 Role of micro finance
- 2.5 Kerala's higher education
- 2.6 Fiscal Crisis

2.7 KIIFB

2.8 Knowledge economy

Suggested readings

2.1, 2.2, 2.3 P. P. Pillai. 1994. Kerala Economy Four Decades of Development.

2.4, 2.5 M A Oommen.1993. Essays on Kerala Economy. Oxford & IBH Publishing Company.

2.6, 2.7 B A Prakash. 1994. Kerala Economy Problems and Prospects. New Delhi: Sage Publications.

2.8 Government of Kerala, State Planning Board, Kerala Economic Review for various years.

Module 3

3.1 Changes in cropping pattern

3.2 Production and productivity of major crops

3.3 Current problems in the agricultural sector

3.4 Decentralized Planning

3.5 Resource mobilization

3.6 Structure of revenue and expenditure of the state

3.7 Fiscal crisis –its causes and consequences

Suggested readings

3.1 Economic and Political Weekly (Special issues on Kerala), various years.

3.2 Economic and Political Weekly, Sep. 1990, Aug. 1995, 1997(32/4), 1998, May 1999, April and Dec., 2003, 2004, Feb., Jul., Aug. & Octo. 2005, April and May 2009, 2013.

3.3 Frank R.W. and B.H. Chasin (1992), Kerala Development through Radical Reform, Promilla and Co., New Delhi.

3.4 Govindan Parayil (ed),(2000), Kerala: the Development Experience, ZED Books, London.

3.5 Joseph Tharamangalam (2006), Kerala : The paradoxes of Public Action and development, Orient Longman, New Delhi.

3.6 Kannan K.P., (1991), Kerala's Development Dilemma, Costford Publication, Thrissur. Lincoln Chen, et. al., (1996), Health, Poverty and Development in India, OUP, Delhi.

3.7 National Council of Applied Economic Research (NCAER) (1962), Techno Economic Survey of Kerala, NCAER, New Delhi.

Module 4

4.1 Sources of pollution

4.2 Deforestation

4.3 Soil erosion, air and water

4.4 Policy framework and regulatory mechanisms to control pollution

4.5 Waste management.

Suggested readings

4.1 Govindan Parayil (ed),(2000), Kerala: the Development Experience, ZED Books, London.

4.2 Joseph Tharamangalam (2006), Kerala : The paradoxes of Public Action and development, Orient Longman, New Delhi.

4.3 Oommen M.A. (ed). 1999, Rethinking Development : Kerala's Development Experience, Concept, New Delhi.

4.4 & 4.5 Oommen M.A. (1993), Essays on Kerala Economy, Oxford and IBH, New Delhi

Core Compulsory Readings

- K.K George. 1993. Limits to Kerala Model of Development: an analysis of fiscal crisis and its implications. Trivandrum:CDS.
- Parayil, Govindan. 2000. Kerala: The Development Experience: Reflections On Sustainability And Replicability. Zed Books.
- Frank, Richard and T.M.Thomas Issac.2000.Local democracy and Development: people's Plan for decentralized planning in Kerala.
- P. P. Pillai. 1994. Kerala Economy Four Decades of Development.
- M A Oommen.1993. Essays on Kerala Economy. Oxford & IBH Publishing Company.
- B A Prakash. 1994. Kerala Economy Problems and Prospects. New Delhi: Sage Publications.
- Government of Kerala, State Planning Board, Kerala Economic Review for various years.

Core Suggested Readings

- B.A. Prakash and Jerry Alwin 2018.Kerala's Economic Development Emerging Issue and Challenges. New Delhi: Sage publications.
- Meerabai M (2008)Kerala Economy: slumber to performance, New Delhi: Serials publications.

TEACHING LEARNING STRATEGIES

Lecture method

Discussion/ Debate

ICT

MODE OF TRANSACTION

- Offline (face-to-face mode)

ASSESSMENT RUBRICS

Marks

End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

Teaching Learning Strategies

B. Continuous Internal Assessment (CIA)

1. Internal Test – Descriptive and analytical type of questions and problems are involved.
2. Book review – every student to review a seminal work on any topic relevant to the course and submit a report
3. Seminar Presentation -with scope for detailed discussion and argument on the theme
4. Assignments – Fundamental topics in the concerned area in the light of burning issues relating to the subject shall be presented and discussed by the learner in the class
5. Online presentations-students may be asked to prepare online teaching and learning materials so as to enable them to be trained in flipped class room mode of teaching

MULTIDISCIPLINARY COURSE

COURSE NAME: MULTIDISCIPLINARY FOUNDATIONS OF ECONOMICS

CREDITS: 2

SEMESTER –II

COURSE CODE – MAECO02MDC03

Course Outline

The course introduces the multidisciplinary roots of contemporary economics. The course provides an overview of topics such as the state, the markets, the society and the individual and how they are linked in the economy. The methodological underpinnings from the pre-classical political economy to neoclassical economics are highlighted.

Course Objectives

1. Examine how history, politics, sociology and economics are related
2. Knowledge of the methodological debates that shaped the contours of various social science disciplines
3. Knowledge of methodological individualism
4. Knowledge of economic imperialism

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

1. Explain the relationship between History, Sociology, Politics and Economics

2. Explain the methodological divergences that shaped the development of social sciences
3. Explain the concepts of positivism, empiricism and subjectivism and its relevance in social sciences
4. Explain the methodological strength of contemporary economics

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
1	1	2	15	30	45	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE CONTENTS

Module 1

(9 hours)

- 1.1 Politics and Economics
- 1.2 Pre Classical schools of thought
- 1.3 Classical Political Economy thought

Module 2

(12 hours)

- 2.1 Economics and history
- 2.2 German historical School, Marginalists and the *Methodenstriet*
- 2.3 British historical economics and Economic History
- 2.4 The Industrial revolution and Capitalism

Module 3

(12 hours)

- 3.1 The Social foundations of Economics
- 3.2 The *Sozialökonomik*
- 3.3 Religion, Capitalism and Economics
- 3.4 Sociology and Economics

Module 4

(12 hours)

- 4.1 Logical and Non logical Positivism
- 4.2 Sociology and Marginalist Revolution
- 4.3 Neoclassicals and the formalist revolution
- 4.4 Economics imperialism and Economic Approach to other disciplines

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

1. Robert L Heilbroner. 1999. The worldly philosophers: The lives, times, and ideas of the great economic thinkers. URL: http://starbooksfeaa.weebly.com/uploads/5/4/8/6/54869709/the_wordly_philosophers.pdf
2. 'Schools of thought' available in <https://www.hetwebsite.net/het/thought.htm>

3. Hunt, E. K., & Lautzenheiser, M. 2011. History of economic thought: A critical perspective. 3rd ed. & Teachings from the Worldly Philosophy (55-157).
4. Maurice Dobb. 2010. Theories of Value and Distribution Since Adam Smith: Ideology and Economic Theory. Chapter 6.
5. Ben Fine & Dimitris Milonakis. 2009. 'From Political Economy to Economics.'
6. James A Caporaso & David P Levine. 1992. Theories of Political Economy.

TEACHING LEARNING STRATEGIES

- Flipped classroom
- Active learning
- Digital learning
- Group/Team work

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

MODE OF TRANSACTION

- **Hybrid**

SKILL ENHANCEMENT COURSE
COURSE NAME: MONEY, BANKING AND FINTECH
CREDIT: 2
SEMESTER –II
COURSE CODE – MAECO02SEC01

Course Outline This course outlines the importance of money and financial markets in an economy. It highlights the organization, structure and role of financial markets and institutions. The course also discusses the policy, management and instruments of monetary control in the contemporary economy. Financial and banking sector reforms and innovations in the financial markets are also covered by giving special reference to India.

Course Objective

1. Knowledge of the concept of money, its functions, supply and measurement
2. Knowledge of the organisational structure and the role of financial markets and institutions
3. Knowledge of the functioning of the financial sector of an economy and the various instruments
4. Knowledge of the recent developments in the banking and financial sector

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

1. Explain the concept of money, its functions, supply and measurement
2. Explain f the organisational structure and the role of financial markets and institutions
3. Expertise of the functioning of the financial sector of an economy and the various instruments
4. Expertise of the recent developments in the banking and financial sector

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
1	1	2	15	30	45	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE CONTENTS

Module 1 (9 hours)

- 1.1 Money Concept
- 1.2 Functions and measurement of money
- 1.3 Theories of money supply determination

Module 2 (12 hours)

- 2.1 Central bank, its functions, indicators and instruments of monetary control
- 2.2 Central bank's balance sheet; goals, targets
- 2.2 Interest rates determination, sources of interest rate differentials
- 2.3 Financial institutions, markets and instruments

Module 3 (12 hours)

- 3.1 Role of financial markets and institutions
- 3.2 Banking system, role of Balance sheet and portfolio management.
- 3.3 Money and capital markets: organisation
- 3.4 Role of financial derivatives and other financial innovations

Module 4 (12 hours)

- 4.1 India's Money and Financial markets - Reforms in the Indian financial system
- 4.2 Monetary management in an open economy; current monetary policy of India
- 4.3 Changing role and structure; banking sector reforms.
- 4.4 Innovations in the financial system - The Case of Fintech

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

1. Bhole, L., Mahukud, J. (2017). Financial institutions and markets, 6th ed. Tata McGraw-Hill.
2. Fabozzi, F., Modigliani, F., Jones, F., Ferri, M. (2010). Foundations of financial markets and institutions, 4th ed. Pearson Education.
3. Khan, M. (2015). Indian financial system, 9th ed. Tata McGraw-Hill.
4. Mishkin, F., Eakins, S. (2017). Financial markets and institutions, 8th ed. Pearson.
5. Various latest issues of RBI Bulletins, Annual Reports, Reports on Currency and Finance, and

Reports of the Working Group, IMF Staff Papers

TEACHING LEARNING STRATEGIES ·

Flipped classroom · Active learning · Digital learning · Group/Team work

Discussion/ Debate

ICT

MODE OF TRANSACTION

- Hybrid

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

MULTIDISCIPLINARY COURSE
COURSE NAME: DATA FOR SOCIAL SCIENCES
CREDITS: 2
SEMESTER –II
COURSE CODE – MAECO02SEC02

Course Outline

The course highlights the importance of data for social sciences. The course introduces the secondary sources of socio-economic data at a global, national and local level. The various socio-economic databases will be introduced along with hands-on training on how to acquire the data from the sources.

Course Objectives

1. Explain the importance of data in social studies
2. Knowledge of the various taxonomies of secondary data and its management
3. Knowledge of the various types of data and the secondary data sources of the World, India and Kerala
4. Knowledge of data acquisition from the various secondary data sources

Course Outcomes

At the end of the Course, the Student will be able to -

1. Explain the various types of data
2. Explain the various types of secondary data, its availability and its management

3. Expertise in handling the databases of the global, India and Kerala
4. Expertise in acquiring various socio economic data

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
1	1	2	15	30	45	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE CONTENTS

Module 1 (9 hours)

- 1.1 Introduction to data
- 1.2 Data as public good
- 1.3 Rise of the Open data
- 1.4 Integrated data system and the role of various entities

Module 2 (12 hours)

- 2.1 Overview of Statistical system in India
- 2.2 MOSPI and data
- 2.3 Macroeconomic data in India
- 2.4 The role of RBI in India's statistical system

Module 3 (12 hours)

- 3.1 External sector linkages and data sources
- 3.2 International databases
- 3.3 Databases on Kerala
- 3.4 Archival and repositories of data

Module 4 (Lab) (12 hours)

- 4.1 Census data and data sources on migration
- 4.2 New methods of data collection and new datasets
- 4.3 Satellite data, Call records data, Weather data
- 4.4 Unofficial data sources

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

1. World Bank. 2021. 'World Development Report 2021: DATA FOR BETTER LIVES.' Available at <https://www.worldbank.org/en/publication/wdr2021>
2. Rao, T. J. (2010). Official Statistics in India: The past and the present. Journal of Official Statistics, 26(2), 215.

3. Mohan, R. (2007). *Statistical System of India: Some Reflections* (Speech given at RBI).
4. Marc Riedel, 2005. **Secondary Data**. Editor(s): Kimberly Kempf-Leonard in *Encyclopedia of Social Measurement*, Elsevier. Pages 455-461, <https://doi.org/10.1016/B0-12-369398-5/00071-2>
5. Narayana, Ranjan and Tyagi. 2021. [Basic Computational Techniques For Data Analysis: An Exploration in MS-Excel](#). Sage India.
6. Govt of India. 2015. 'e-Book 2015' MOSPI. Available at https://mospi.gov.in/sites/default/files/main_menu/ebook/index.html#page/2
7. Reserve Bank of India. 2017. Database on the Indian Economy. <https://dbie.rbi.org.in/DBIE/doc/Brochure%20on%20DBIE%20-2017%20English.pdf>
8. Govt of India. 2022. 'Datasets and Registries in India.' MOSPI. Available at https://mospi.gov.in/sites/default/files/publication_reports/Datasets%20and%20Registries%20in%20India%2020221651228036618_0.pdf
9. United Nations. UNDATA. Available at <http://data.un.org/datamartinfo.aspx>
10. World Bank. 2021. 'World Development Report 2021: DATA FOR BETTER LIVES.' Available at <https://www.worldbank.org/en/publication/wdr2021>
11. United Nations. <https://unstats.un.org/sdgs/dataportal>
12. Schade et al. 2017. 'Using new data sources for policymaking.' Joint Research Centre (JRC), the European Commission's science and knowledge service. Available at [https://publications.jrc.ec.europa.eu/repository/bitstream/JRC109472/jrc109472_final_online\(1\).pdf](https://publications.jrc.ec.europa.eu/repository/bitstream/JRC109472/jrc109472_final_online(1).pdf)
13. World Bank. 2021. 'World Development Report 2021: DATA FOR BETTER LIVES.' Available at <https://www.worldbank.org/en/publication/wdr2021>
14. Schade et al. 2017. 'Using new data sources for policymaking.' Joint Research Centre (JRC), the European Commission's science and knowledge service. Available at [https://publications.jrc.ec.europa.eu/repository/bitstream/JRC109472/jrc109472_final_online\(1\).pdf](https://publications.jrc.ec.europa.eu/repository/bitstream/JRC109472/jrc109472_final_online(1).pdf)
15. Government of Kerala. 2020. [Economic Review 2020 | State Planning Board, Thiruvananthapuram, Kerala, India](#)
- 1.6 GoI. 2001. 'Report of Dr Rangarajan Commission' MOSPI. Available at <https://www.mospi.gov.in/report-dr-rangarajan-commission>
17. RBI. 2017. Comprehensive Guide for Current Statistics of the RBI Monthly Bulletin. Available at <https://m.rbi.org.in/scripts/PublicationsView.aspx?id=17618>
18. United Nations. 'Global Migration Database.' Available at <https://www.un.org/development/desa/pd/global-migration-database>
19. IMF. Climate Change data. Available at <https://climatedata.imf.org/pages/climatechange-data>

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

1. IMF. 2023. World Economic Databases. Available at <https://www.imf.org/en/Publications/WEO/weo-database/2023/April/select-subjects?c=534>,
2. Giovannini, E. 2008. 'Understanding Economic Statistics AN OECD PERSPECTIVE.' Available at <https://www.oecd.org/sdd/41746710.pdf>

TEACHING LEARNING STRATEGIES

- Flipped classroom
- Active learning
- Digital learning
- Group/Team work

MODE OF TRANSACTION - Hybrid

OPTIMIZATION TECHNIQUES IN ECONOMICS
SEMESTER –II
SKILL ENHANCEMENT COURSE
COURSE CODE – MAECO02SEC03
CREDIT-2
Course Description

The course is divided into four modules. The course intends to familiarize the students with the concept of operations research and also the operations research models like linear programming problem, transportation and assignment problem.

Course Objectives

- To discuss the basic concept of operations research in economics.
- To enables the students to familiarize with Operation Research techniques and its applications in managerial decision making.

Course Name: Optimization Techniques in Economics

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
1	1	2	15	30	45	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

CO1	Express various operations research concepts suitable for finding optimal solutions in economics.
CO2	Relay various operations research models to solve business problems.
CO3	Pertain the techniques of maximizing profit in real market scenario.

COURSE CONTENTS

Module 1: History and development of Operations Research (OR)

1. 1 Operations Research- meaning and definition
1. 2 Scope of OR
1. 3 OR techniques- uses
1. 4 Methodology of OR
1. 5 Limitations of operations research

Suggested readings

1.1 to 1.5 J.K Sharma. 1997. *Operations Research- Theory and Applications*.

Module 2: Linear Programming (LPP)

2. 1 Linear programming – mathematical formulation
2. 2 Solution to LPP- graphical method
2. 3 Simplex method
2. 4 Duality

Suggested readings

2. 1 , 2.2 J.K Sharma. 1997. *Operations Research- Theory and Applications*.

2.3, 2.4 William J. Baumol. 1999. *Economic Theory and Operations Analysis*. New Delhi: Prentice Hall of India.

Module 3: Transportation Problem

- 3.1 Transportation problem
- 3.2 Methods for solving initial basic feasible solution-North–West Corner rule
- 3.3 Lowest cost entry method
- 3.4 Vogel’s Approximation method
- 3.5 Optimal solution- MODI method

Suggested readings

3. 1 to 3.5 J.K Sharma. 1997. *Operations Research- Theory and Applications*.

Module 4: Assignment Problem

- 4.1 Assignment problem – Meaning
- 4.2 Hungarian method of solving assignment problem
- 4.3 Unbalanced and maximization assignment problem

Suggested readings

4. 1 to 4.2 J.K Sharma. 1997. *Operations Research- Theory and Applications*.

4. 3 William J. Baumol. 1999. *Economic Theory and Operations Analysis*. New Delhi: Prentice Hall of India.

Core Compulsory Readings

- J.K Sharma. 1997. *Operations Research- Theory and Applications*.
- William J. Baumol. 1999. *Economic Theory and Operations Analysis*. New Delhi: Prentice Hall of India.
- Anderson, Sweeney & Williams 2007, *An Introduction to Management Science- Quantitative approaches to Decision Making*. Thomson- South Western.

- Rao S.S. *Optimisation Theory and Applications*.New Age International.
- Taha.H.A. *Operations Research- An Introduction*.Mc.Millan.
- Kanthi Swarup, Gupta and Man Mohan.*Operations Research*. Sultan Chand & Sons

Core Suggested Readings

- 5 Philips Ravindran and Solberg.*Operations research, principles and Practice*, John Wiley
- 6 R. Pannerselvam. 2002. *Operations Research*. PHI

TEACHING LEARNING STRATEGIES

- Lecture method
- Problem solving method
- ICT

MODE OF TRANSACTION

Offline (face-to-face mode)

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

**ORGANISATIONAL PSYCHOLOGY AND CONSUMER BEHAVIOUR
ABILITY ENHANCEMENT COURSE
SEMESTER –II
COURSE CODE – MAECO02AEC01**

Course Outcomes (COs): After the successful completion of the course, the student will be able to:

CO1. Understand the meaning, nature, and scope of the contemporary approach to oragnisational process and consumer behaviour.

CO2. To describe an organisational process in an establishment, and to identify attributes of individual process in different social and cultural setting

CO3. To impart knowledge and techniques in human resource planning, interpersonal process, group dynamics and communication.

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
1	1	2	15	30	45	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

MODULES	DESCRIPTION	45 Hours
Module I	Introduction to Organisational Psychology	10 hrs
	Organisational behaviour – managing people at work – Individual process-abilities and aptitude- perception and motivation- personality and performance – managing stress – interpersonal process –leadership- group dynamics- team building	
Practicum	Group Discussions and activities to develop and manage groups to achieve organisational goals	
Module II	Organisational Process	10 hrs
	Organisational Design and Structure- Organisational Culture- Entrepreneurial and Market Culture- Organisational Change- Change Management-Overcoming Resistance- Promoting Change- Ethical Issues in Organisational Change – Organisational diagnosis	
Practicum	Assignment on Quality of Work Life Group discussion on Planned Organisational Change	
Module III	Introduction to Consumer Behaviour and Consumer Research	10 hrs
	Consumer needs and motivation- attitude, perception and consumer involvement-Consumers in their social and cultural setting - Market Segmentation and Positioning- Consumer research process- Ethics in marketing	
Practicum	Seminars	
Module IV	Consumer Decision Making Process	15 hrs
	Levels of decision making- Models of Consumer Decision Making Process- Purchase behaviour- Communication and Persuasion- Advertising Channels- Opinion Leadership process- Marketing Strategy and Innovation	
Practicum	Project on Innovative ideas that influence consumer decisions	

References	
1	Robbins Stephen. P (1997) Organisational Behaviour, S. Prentice Hall of India, New Delhi

- 2 Gregory. B Northerft and Margaret A. Neale (1990) Organisational Behaviour,Holt, Rinchart, Euinssou, USA
- 3 Prasad L. M, (2017) Organisational Behaviour, S. Chand Publishers, New Delhi.
- 4 Fred Luthans (1989) Organisational Behaviour Mc Graw Hill Book Company, Singapore

5	Tripathi & Reddy, (2008) Principles of Management, Tata McGraw-Hill, New Delhi, Laurie
6	Meenakshi Gupta, (2009) Principles of Management, PHI Learning, New Delhi,
7	Gupta (2016), Human resource Management. S Chand Publisher. New Delhi
8	Aswathappa K. (2020) Human resource Management, Tata Mc Graw Hill Publishing Co. Ltd.
9	Koontz, Weirich & Aryasri, (2004) Principles of Management, Tata McGraw-Hill, New Delhi,

TEACHING LEARNING STRATEGIES

- Flipped classroom
- Active learning
- Digital learning
- Group/Team work

MODE OF TRANSACTION

- **Hybrid**

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

HEALTH ECONOMICS

Course Description

Health economics is a growing field of economics primarily dealing with issues relating to scarcity in the allocation health and health care. The aim of this proposed course is to familiarize the students with economic ideas and motivate them into undertaking future research and build their careers in health economics. The course is divided into four modules which cover introduction of health economics, theoretical foundation, health planning, health care system, externality, market failure and urban health system.

Course Objectives

1. The course expects to furnish under studies with adequate foundation in wellbeing financial matters hypothesis to have the option to see how the social insurance advertise functions and under what conditions human services can be productively delivered and apportioned however markets, guidelines and arranged framework.
2. Specifically the course furnish under studies with capacity to comprehend the ramifications of market and government disappointments with regards to human services, and see what number of foundations and administrative game plans saw in the area can be connected to various kinds of business sectors.
3. To give a prologue to wellbeing financial aspects hypothesis and techniques and how they could be applied to dissect the working of wellbeing framework and the determinants of wellbeing and utilization of wellbeing administrations.
4. How medical coverage impacts the interest at social insurance and its costs.

**SEMESTER III
MULTI- DISCIPLINARY COURSE
CREDIT-4**

Course Code: MAECO03MDC04

Course Name: HEALTH ECONOMICS

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
3	1	4	45	30	75	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE OUTCOMES

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

CO Number	CO Statement
CO 1	Explain the dimensions of health
CO 2	Discuss the occupational health hazards and its linkages
CO 3	Analyse economics of public health
CO 4	Measure burden of disease and future challenges.
CO 5	Construct the production function with respect to health

COURSE CONTENTS

Module 1

Introduction:

1. 1 Health Economics- Nature and scope
1. 2 Determinants of Health
1. 3 Health and Development
1. 4 Issues of availability, accessibility, cost and quality.

Theoretical Foundations in Health Economics:

1. 5 Demand and Supply for Health
1. 6 Demand and Supply of Human resources for health
1. 7 The Production of Health
1. 8 The Demand and supply of health workers
1. 9 Determinants of Demand and supply

Suggested readings

- 1.1, 1.2, 1.3 & 1.4 Holland, Goodman and Stano. 2009. The Economics of Health and Health Care. Pearson Education.
- 1.5, 1.6 & 1.7 Zweifel, P and Breyer, F. 1997. The Health Economics. OUP: Oxford.
- 4.14 Turshen. M .1989.The Politics of Health. London: Zed Books Ltd.
- 4.15 Monica Das Gupta, Chen. L.C and Krishnan T. N. 1996. Health, Poverty and Development in India. New Delhi: OUP.

Module 2

Health planning & Health care system

2. 1 Stages and challenges in planning
2. 2 Health inequalities
2. 3 Health financing
2. 4 Health problem performance – concepts
2. 5 Criteria and measurement
2. 6 Health system organization models
2. 7 Health care system - Four models of health care system

Suggested readings

- 2.1, 2.2, 2.3 & 2.4 John Davis. 2001. The Social Economics of Health Care. London: Routledge.
- 1 Imrana Quadeer ed. 2003, Public Health and Poverty of Reforms, New Delhi: Sage publications.
- 2 Lee, Kenneth and Anne Mills ed. 1985.The economics of Health in Developing Countries. OUP: Oxford.
- 3 Baru, R, V. 1998. Private Health Care in India: Social Characteristics and Trends. New Delhi: Sage publications.

Module 3

Externalities and Market Failure:

- 3.1 Issues of Externalities
- 3.2 Private sector in health care provision
- 3.3 Role of public/private mix in health system
- 3.4 Privatization of public health
- 3.5 Problem of mixing public and private
- 3.6 Government Intervention in Health Care Markets
- 3.7 Economic Rationale for Government Intervention
- 3.8 Government Failures and Competitive Strategies

Suggested readings

- 3. 1 to 3.5 Berman Peter. 1995. Health Sector Reforms in Developing Countries, Making Health Developments Sustainable. Boston: Harvard School of Public Health.
- 3.6 to 3.8 Arrow, Kenneth J. 1963 Uncertainty and welfare economics of medical care. American Economic Review.

Module 4

Urban health system:

- 4. 1 An overview of methods of studying urban health system
- 4. 2 Health Care Sector in India
- 4. 3 Public and Private Care Providers
- 4. 4 Factors influencing the growth of private sector in health economic reforms and Health Sector in India
- 4. 5 Health Insurance
- 4. 6 Health and nutritional deprivation among the marginalized
- 4. 7 Health Care Development in Kerala

Suggested readings

- 1. Berman Peter. 1995. Health Sector Reforms in Developing Countries, Making Health Developments Sustainable. Boston: Harvard School of Public Health.
- 2. Arrow, Kenneth J . 1963. Uncertainty and welfare economics of medical care. American Economic Review.
- 3. Guy Carrin. 2009. Health Systems Policy, Finance, and Organization. Academic Press
- 4. Gangadharan K. 2010. Health and Development: The Millennium Perspectives. New Delhi: Rawat Books.

Core Compulsory Readings

- 1. Holland, Goodman and Stano. 2009. The Economics of Health and Health Care. Pearson Education.

2. Zweifel, P and Breyer, F. 1997. The Health Economics. OUP: Oxford.
3. Turshen. M .1989.The Politics of Health. London: Zed Books Ltd.
4. Monica Das Gupta, Chen. L.C and Krishnan T. N. 1996. Heath, Poverty and Development in India. New Delhi: OUP.
5. John Davis. 2001. The Social Economics of Health Care. London:Routledge.
6. Imrana Quadeer ed. 2003, Public Health and Poverty of Reforms, New Delhi: Sage publications.
7. Lee, Kenneth and Anne Mills ed. 1985.The economics of Health in Developing Countries. OUP: Oxford.
8. Baru, R, V. 1998. Private Health Care in India: Social Characteristics and Trends. New Delhi: Sage publications.
9. Berman Peter. 1995. Health Sector Reforms in Developing Countries, Making Health Developments Sustainable.Boston:Harvard School of Public Health.
10. Arrow, Kenneth J. 1963 Uncertainty and welfare economics of medical care. American Economic Review.
11. Guy Carrin. 2009. Health Systems Policy, Finance, and Organization. Academic Press

Core Suggested Readings

1. Narayana D . 2008. High Health Achievements And Good Access To Health Care At Great Cost: The Emerging Kerala Situation in Haddad et.al (ed): Safeguarding the health sector in times of macroeconomic instability: policy lessons for low- and middle-income countries.
2. Wagstaff, Adam . 1986. The Demand for Health: A Simplified Grossman Model. Bulletin of Economic Research, Vol.38, No.1.
3. Gangadharan K. 2010. Health and Development: The Millennium Perspectives. New Delhi: Rawat Books.
4. Gangadharan K. 2009. Paradigm Shift in health and Education in India. New Delhi: Serials.
5. Ashokan, A. 2009.Perspectives of Health Economics. New Delhi: Serials Publications.
6. Gangadharan. K. 2012. Nutritional and Health care deprivation An inter caste analysis. New Delhi: Manglam Publication.

TEACHING LEARNING STRATEGIES

Lecture method
 Discussion/ debate
 MOODLE
 ICT

MODE OF TRANSACTION

Offline (face-to-face mode)/ online

ASSESSMENT RUBRICS

Marks	
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

Sample Questions to test Outcomes.

- Examine the determinants of health.
- Assess the problems of health care system.
- How would you determine the demand for medical care?
- Demonstrate the criteria and measurement of health performance.
- Examine the production function of health.

Mapping of COs with POs & PSOs

Course Outcomes	Programme Outcomes					Programme Specific Outcomes				
	PO 1	PO 2	PO 3	PO 4	PO 5	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO 1	N	M	S	N	M	M	S	W	M	M
CO 2	M	M	S	S	M	S	S	S	S	M
CO 3	M	M	S	S	M	S	S	S	S	M
CO 4	S	S	S	S	S	S	S	M	S	S
CO 5	N	M	S	N	M	M	S	W	M	M

*S-Strong correlation, M-Moderate correlation; W- Weak correlation, N – No correlation

**MULTI- DISCIPLINARY COURSE
SEMESTER –III**

CREDIT-4

COURSE CODE – MAECO03MDC05

Course Title	Introduction to Gender Economics	No. of Credits	4
Contact hours	75 Hours	Duration of ESE Exam	3 Hours
CE Marks	40	ESE Marks	60

COURSE OUTCOMES

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

C01	Understand various concept of gender economics and its relevance in understanding
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	economic disparities
C02	Apply theories to analyze the causes and consequences of gender-based inequalities in different sectors (e.g., labor market, education, entrepreneurship).
C03	Analyze case studies or research papers on gender economics to identify underlying factors influencing gender disparities
C04	Evaluate the international developments and planning for development
C05	Evaluate the effectiveness of gender-focused economic policies and programs in reducing gender inequalities.

C06 Assess the impact of cultural and societal norms on gender economics.

C07 Develop innovative solutions and policies to promote gender equality in economic opportunities and outcomes.

*Course outcomes based on revised blooms taxonomy

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
3	1	4	45	30	75	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE CONTENTS

Module 1

1. Introduction to Gender studies (15 hours)

1. 1 Concepts of Gender and Sex
1. 2 Importance of women and gender studies
1. 3 Gender and Economic development – Measures of Gender development
1. 4 World and India Analysis of gender relations

Suggested readings specific to the module.

- 1.1 Evans M and Williams C, (2012) Gender: The Key Concepts, Routledge, London
- 1.2 Evans et al, (2015) The Sage Handbook of Feminist Theory Sage, London
- 1.3 Boserup, Ester(1970), Woman's Role in Economic Development / Ester Boserup; new introduction by Nazneen Kanji, Su Fee Tan and Camilla Toulmin.-- London: Earthscan, (re print-2007)
- 1.4 Benería, L.(2003) Gender, Development & Globalisation. Economics As If All People Mattered. London & NY: Routledge;

Module 2

2. Gender Dynamics (15 hours)

2. 1 Gender dynamics -marriage -reproduction - age structure- mortality - fertility–sex ratio
2. 2 Theories of power and the relations between the psyche and the social
2. 3 Gender representation and rights-gender roles and stereotypes
2. 4 Contemporary issues of gender

Suggested readings specific to the module.

2. 1 Sen, Suvarna, (2006), Gender and Development, ICFAI University Press, Hyderabad,
2. 2 A. Venkateswarlu, et al. (2013), Dimensions of Female Sex Ratio.; Interstate Variations in India, Serials Publications, New Delhi.
2. 3 UNRISD, (2004) Gender Equality; Striving for Justice in an Unequal World, UNRISD, France
2. 4 Desai, N and M. KRaj (1974), Women and Society in India, SNDT University, Mumbai
2. 5 Ahmed S, (2017) Living a Feminist Life, Duke University Press, Durham

Module 3

Gender and Labour Market

(15 hours)

3. 1 Work participation - Wage differentials and its determinants
3. 2 Gender and Education
3. 3 Feminist movements, LGBTQIA+ rights
3. 4 Role of civil society and Role of N.G. O's

Suggested readings specific to the module.

- 3.1 Dutta, Nandita and, Sumitra Jha (2014), Women Social Work and Social Welfare, Pacific Books International, New Delhi.
- 3.2 Wazir, R, (2000), The Gender gap in Basic Education.; NGO's as change Agents, Sage Publications, Delhi
3. 3 Kabeer, N. (2003) Gender Mainstreaming in Poverty Eradication and the Millennium Development Goals: a handbook for policy-makers and other stakeholders, London: Commonwealth Secretariat.
3. 4 Mohanty C, (2003) Feminism without Borders Decolonizing Theory, Practicing Solidarity, Duke University Press, Durham
3. 5 Butler, J (1999) Gender Trouble, Routledge, New York & London
3. 6 Agarwal, B. (2016) Gender Challenges (Vol 1, 2 and 3). India: Oxford University Press.
- Benería, L. Berik, G and Floro, M. (2015) Gender, Development and Globalization: Economics as if All people Mattered, London: Routledge. (2nd Edition).

Module 4

Social Security and Rights

(30 hours)

4. 1 Measures for gender well being
4. 2 Review of legislation- gender quotas and collective action
4. 3 National policies for gender development
4. 4 UN measures of Gender development

Suggested readings specific to the module.

- 4.1 Visvanathan, N. et.al. (2012) The Women, Gender and Development Reader, London: Zed Books.
4. 2 Selwyn, B. (2014) The Global Development Crisis, Cambridge: Polity Press.
4. 3 Stiglitz, J. (2015) The Great Divide. Unequal Societies and What We Can Do About Them, London: Penguin.

4. 4 Walby, S. (2009) Globalisation and inequalities: Complexity and contested modernities. London: SagePublicationsLtd.
- 4.4 Govt. of India (1974), Towards equality-Report of the committee on the status of women in India, Dept of Social Welfare,Ministry of Education and Social Welfare,New Delhi.
4. 5 Govt.of India (2009), Gender Equality and Women Empowerment in India, National Family Health Survey 2005-06 (NFHS-3),IIPS,Mumbai
4. 6 Jaggar, A. (2014) Gender and Global Justice, Bristol: Polity
4. 7 Marchand, M. and Runyan, A. (2011) Gender and Global Restructuring, second editionLondon: Routledge.
4. 8 Milanovic, B. (2016) Global Inequality: A New Approach for the Age of Globalization, Harvard: Harvard University Press

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

2. Sen,Amartya.(1990), “More than 100 million women are missing” Newyork Review of books,vol.37,No.20,1990.
3. Dutta,Nandita and,Sumitra Jha(2014),Women and Agricultural Development ,Pacific Book,New Delhi.
4. Dutta,Nandita and,Sumitra Jha(2014),Women and Rural Development ,Pacific Books Internat, Delhi
5. Harilal,K.N.,Kanji,N.,Jeyaranjan,J.,Eapen,M.and Swaminathan,P (2006) Power in Global Value Chain; Implications of cashew nut industry in India ,IIED
6. Hemmings C, Why Stories Matter: (2011) The Political Grammar of Feminist Theory, Duke University Press, Durham
7. Hill Collins P and Bilge S, (2016) Intersectionality, Polity, London
8. ILO,(2002) Women and Men in the Informal Economy; A statistical Picture,ILO
9. Jitendra Ahirrao(2013), Entreprenuership and Rural Women in India ,New Century Publications,New Delhi.
10. Krishna Raj .M, Sudarshan.R.M, and Shariff.A,(1999) ,Gender,Population and Development ,Oxford University Press,New Delhi
11. Pal,Manoranjan et .al (Ed)(2011),Health,Nutritional Status and Role of women in India, Oxford University Press, New Delhi.
12. Sen,Sujatha ,(2012) Gender studies,Dorling Kindersely(India)Pvt.Ltd,New Delhi.
13. Seth .M,(2000)Women and Development ;The Indian Experience ,Sage Publications,New Delhi
14. Srinivasa.K, and A.Shroff (1998)India Towards population and Development Goals , OUP,New Delhi
15. Various issues of Economic and Political Weekly.(for e.g .John Mary .E.(1996)”Gender and Development in India EPW,31(47),PP 3071-77)
16. Weigman R, (2012) Object Lessons, Duke University Press, Durham

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

17. Foucault M (1990) The History of Sexuality Vol 1 Penguin, Houndsmills
18. Mirchandani, K. (2012) Phone Clones. Authenticity Work in the Transnational Service Economy, Ithaca: ILR Press.
19. Butler J, (1997) the Psychic Life of Power, Stanford University Press, Stanford

20. Chant, S. (ed.) (2010) *International Handbook of Gender and Poverty: Concepts, Research, Policy*, Cheltenham: Edward Elgar.
 21. Cook, S. and Kabeer, N. (2010) *Social Protection as Development Strategy*, London: Routledge.
Cornwall, A., Harrison, E. & Whitehead, A. (eds) (2007) *Feminisms in Development: contradictions, contestations, and challenges*, London: Zed Books.
 22. Cornwall, A., Edstrom, J. and Greig, A. eds. (2011) *Men and Development: Politicising Masculinities*, London: Zed Books.
 23. Devaki, J. and Elson, D. (2011) *Harvesting Feminist Knowledge for Public Policy*, IDRC, London: Sage
 24. Eadie, Jo (ed) (2004) *Sexuality. The Essential Glossary*, publisher Hodder Education
 25. Escobar, A. (2011) *Encountering Development: The Making and Unmaking of the Third World*, Princeton University Press
Kabear, N. (2001) *The Power to Choose. Bangladeshi women and labour market decisions in London and Dhaka*, London: Verso.
 26. Ong, A. (2010) *Spirits of Resistance and capitalist Discipline*, 2nd Edition New York: Suny Press.
 27. Patel, R. (2010) *Working the Night Shift. Women in India's Call Centres*, Stanford: University Press.
 28. Perrons, D. (2004) *Globalization and Social Change*, London: Routledge.
 29. Spierings, N. (2015) *Women's employment in Muslim countries: patterns of diversity*. Basingstoke, Hampshire: Palgrave Macmillan.
- Walby, S. (2011) The future of feminism. Cambridge: Polity Press.*

TEACHING LEARNING STRATEGIES

- Flipped classroom
- Active learning
- Digital learning
- Group/Team work

MODE OF TRANSACTION

- **Hybrid**

**MULTI- DISCIPLINARY COURSE
SEMESTER –III
CREDIT-4
COURSE CODE – MAECO03MDC06**

Course Title	Econometrics for Social Science	No. of Credits	4
Contact hours	90 Hours	Duration of ESE Exam	3 Hours
CE Marks	40	ESE Marks	60

Course Outcomes (COs): After the successful completion of the course, the student will be able to:

CO1. Knowledge of the various econometric models for social science

CO2. Knowledge of the basis computational skills for estimating, testing and forecasting data

CO3. Analysing various social science research problems with the help of econometrics

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
2	2	4	30	60	90	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

MODULES	DESCRIPTION	90 Hours
Module I	Econometrics- Basic Concepts	30 hrs
	Social science research – types of data- definition and scope of Econometrics - methodology of econometrics -two variable regression analysis-estimation	
Practicum	Develop and create models	
Module II	Dummy Variable Models	30 hrs
	Dummy variables- Use of dummy variables- Regression on dummy variables dummy variable trap - Dummy dependent variable models- LPM, Logit, Probit, Tobit Models	
Practicum	Assignment and Lab work	
Module III	Lagged Variable Models	15 hrs
	Reason for lag – distributed lag model- Auto regressive models- Koyck and Nerlov's model	
Practicum	Seminars	
Module IV	Simultaneous equation model and Estimation	15 hrs
	Simultaneous equation model – nature – simultaneous equation bias – structural and reduced form model- Identification problem- Simultaneous equation methods of estimation- ILS- 2SLS	
Practicum	Project on Application of econometric tool on contemporary issues in social science	

References

1. Klien L.R..1962 *Introduction to Econometrics*. New Jersey: Prentice Hall Inc. Englewood Cliffs.
2. Damodar N. Gujarati.1992. *Essentials of Econometrics*. McGraw Hill.

3 Damodar N. Gujarati.2000. *Econometrics*.

4 Damodar N. Gujarati1995. *Basic Econometrics*.McGraw Hill.

5	Michael D. Intriligator.1980. <i>Econometric Models, Techniques and Applications</i> , New Delhi: Prentice Hall of India.
6	A. Koutsoyiannis.2004. <i>Theory of Econometrics</i> . Palgrave.
7	Greene, W. 2008. <i>Econometrics Analysis</i> . Pearson.
8	Johnston, J. and John Di Nardo, 1997. <i>Econometric Methods</i> . 4th Edition, London: McGraw-Hill Companies Inc
9	Desai, Meghand. 1976. <i>Applied Econometrics</i> . New York: McGraw Hill Book Co.

10 Baltagi, B. H. 2008. *Econometric Analysis of Panel Data*.4th edition, John Wiley.

11 Enders, Walter .2009. *Applied Econometric Time Series*. 3rd Edition, Wiley

12 Everitt, Brian S and Dunn, Graham. 2001. *Applied Multivariate Data Analysis*. Second Edition. Arnold.

TEACHING LEARNING STRATEGIES

- Flipped classroom
- Active learning
- Digital learning
- Group/Team work

MODE OF TRANSACTION

- **Hybrid**

ASSESSMENT RUBRICS

	Marks
End Semester Evaluation	60
Continuous Evaluation	40
Assignment	8
Seminar	16
Test	16

**MULTI- DISCIPLINARY COURSE
SEMESTER –III
COURSE CODE – MAECO03MDC07**

Course Title	Introduction to Behavioural Economics	No. of Credits	4
Contact hours	75 Hours	Duration of ESE Exam	3 Hours
CE Marks	40	ESE Marks	60

Course Outcomes (COs): After the successful completion of the course, the student will be able to:

C01 Students will get exposure to the frontier of empirical research in Behavioural Economics

C02	Students will learn how to critically assess a rapidly evolving literature and how to develop and present a research proposal, as well as designing novel ideas related to Research in Behavioural Economics
C03	Learn how to test (Behavioural) economic theory using field experiments and non-experimental data
C04	Skill development in students catering to the needs of the industry and policy makers

Credit			Teaching Hours			Assessment		
L/T	P/I	Total	L/T	P/I	Total	CE	ESE	Total
3	1	4	45	30	75	40	60	100

Lecture/Tutorials, P/I=Practical/Internship, CE =Continuous Evaluation, ESE = End Semester Evaluation

COURSE CONTENTS

Module 1: Introduction

- 1.1 What is behavioural economics?
- 1.2 History and theories of behavioural economics
- 1.3 Relation with other disciplines
- 1.4 Objectives, and scope
- 1.5 Methodology of behavioural economics
- 1.6 Concepts of behavioural economics

Essential Reading

- 1.1 Thaler, Richard H (2016). *"Behavioral Economics: Past, Present, and Future"*. American Economic Review.
- 1.2 Thaler, Richard H.; Mullainathan, Sendhil (2008). *"Behavioral Economics"*. In David R. Henderson (ed.). *Concise Encyclopedia of Economics* (2nd ed.).

1.3 Hogarth, R. M.; Reder, M. W. (1987). “*Rational Choice: The Contrast between Economic and Psychology*”. Chicago: University of Chicago Press.

1.4 Shleifer, Andrei (1999). “*Inefficient Markets: An Introduction to Behavioral Finance*”. New York: *Oxford University Press*.

1.5 *An introduction to behavioural economics by Wilkinson and Klaes, Palgrave MacMillan*

1.6 *Behavioural Economics and Finance, by Michelle Beddeley, Rutledge, 2019*

Supplementary Reading

1.1 Hogarth, R. M.; Reder, M. W. (1987). “*Rational Choice: The Contrast between Economics and Psychology*”. Chicago: University of Chicago Press.

1.2 Kahneman, Daniel; Tversky, Amos (1979). “*Prospect Theory: An Analysis of Decision under Risk*”. *Econometrica*.

1.3 Gerrit Ando Antonides (1991).“*Psychology in Economics and business*”.Springer Science Business Media

1.4 Rob Rinyard, Wiley (2018), “*Economic Psychology*” (ed) , chapter 16

1.5 Alan Lewis (2008). “*The Cambridge Handbook of Psychology and Economic Behaviour*”, (Edt.), Cambridge University Press.

1.6 Robert L. Leahy (2003). “*Psychology and the Economic Mind Cognitive Processes & Conceptualization*”, Springer Publishing Company.

1.7 Stefan Heidl (2016).“*Philosophical Problems of Behavioural Economics*”, Routledge.

1.8 David De Cremer, Marcel Zeelenberg and J. Keith Murnighan (edt) (2012). “*Social Psychology and Economics*” , Psychology Press.

Module II: Microeconomic Foundation of Behavioural economics

2.1 Values, preferences and choice-

2.2 Beliefs, heuristic and biases

2.3 state dependent preferences

2.4 bounded rationality

2.5 prospect theory

2.6 dependent preference

2.7 mental accounting

2.8 Inter temporal choice

2.9 social preferences

2.10 Nudges and Happiness.

Essential Reading

2.1 Nick Wilkinson, Matthias Klaes(2012). “*An introduction to behavioural economics*” Palgrave MacMillan

2.2 Michelle Beddeley (2019). “*Behavioural Economics and Finance*”. Rutledge.

Supplementary Reading

2.1 Alexander Rajko (2012).“*Behaviour economics and business ethics- interrelation and application*” Rutledge, London, Philosophical problems of behavioural economics by Steffan Heidl, Routledge, 1996

- 2.2 Michael S Zoubulakis (1997).“*Varieties of modern economic rationality – from Adam Smith to Contemporary Behavioural and evolutionary economists*”, Routledge.
- 2.3 J.L. Buxter (1993). “*Behavioural foundations of economics*” by, McMillan Press

Module III: Behavioural macro economics

- 3.1 Neo-Keynesian Rational Expectation model
- 3.2 role of rational expectation in business cycle and labour market equilibrium
- 3.3 the role of monetary policy and the determination of asset prices
- 3.4 Animal Spirits and economic decisions

Essential Reading

- 3.1 Paul De Grauwe and Yeumei Ji (2019).“*Behavioural Macro Economics -Theory and Policy*, Oxford University Press.
- 3.2 Cunningham, Lawrence A.(2002).“*Behavioral Finance and Investor Governance*. Washington & Lee Law Review.
- 3.3 Diamond, Peter; Vartiainen, Hannu (2012). “*Behavioral Economics and Its Applications*”.Princeton University Press.
- 3.4 Hens, Thorsten; Bachmann, Kremena (2008). “*Behavioural Finance for Private Bankin*”.Wiley Finance Series.

Supplementary Reading

- 3.1 Ayala and A. Palacio-Vera (2014) “*The Rational Expectations Hypothesis: An assessment from Popper’s Philosophy*”, http://www.levyinstitute.org/pubs/wp_786.pdf
- 3.2 Muth, J.F. (1961). “*Rational Expectations and the Theory of Price Movements*”, *Econometrica*, 29(3), pp. 315-335.
- 3.3 S. Rebelo (2005) “*Real Business Cycles Models: Past, Present and Future*”
<http://www.kellogg.northwestern.edu/faculty/rebelo/htm/rbc.pdf>
- 3.4 R. Lucas (1995) “*Monetary Neutrality*”, Nobel Price Lecture ,
https://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1995/lucas-lecture.pdf
- 3.5 A. Lo (2007) “*Efficient Markets Hypothesis*” in L. Blume and S. Durlauf, *The New Palgrave: A Dictionary of Economics*.
- 3.6 G. Akerlof, (2001), “*Behavioral Macroeconomics and Macroeconomic Behavior*”, Nobel Prize Lecture.
- 3.7 G. Akerlof and R. Shiller, (2009), “*Animal Spirits*”, Princeton University Press.
- 3.8 Lucas, Robert E., Jr. and Thomas J. Sargent,(1979) “*After Keynesian Macroeconomics,*” in Federal Reserve Bank of Boston
- 3.9 *After the Phillips Curve: Persistence of High Inflation and High Unemployment*, Conference Series, 1978.
- 3.10 Farmer, R.(1993), “*Macroeconomics of Self Fulfilling Prophecies*”, MIT press.

Module IV: Applied Behavioural Economics

- 4.1 Behavioural economics on Welfare and Policy Analysis -Conceptualising and measuring welfare, saving, addiction and public good
- 4.2 Behavioural Economics and Development Economics
- 4.3 Behaviour economics and labour market

- 4.4 Behavioural economics and health economics
- 4.5 Behavioural economics and organisational behaviour

Essential Reading

- 4.1 Peter Diamond and Hannu Vartiainen (ed.).(2012) *“Introduction to Behavioral Economics and Its Applications-*, Princeton University Press.
- 4.2 BD Bernheim, S DellaVigna, D Laibson(ed) (2019). *“Handbook of Behavioral Economics-Foundations and Applications -*, North Holland .
- 4.3 Sanjit Dhami (2020). *“The foundations of behavioural economics”*. Oxford.
- 4.4 Rodica Ianole (2016). *“Applied Behavioral Economics Research and Trends”*, IGI Global.

Supplementary Reading

- 4.1 Loewenstein (1987) *“Anticipation and the Valuation of Delayed Consumption”*. Economic Journal, 97(387): 666— 684.
- 4.2 Brunnermeier, Markus, K., and Jonathan A. Parker (2005). *“Optimal Expectations.”* American Economic Review, 95(4): 1092-1118.
- 4.3 Kahneman and Tversky (1979) *“Prospect Theory: An Analysis of Decision Under Risk”*, Econometrica, 47(2): 263– 291.
- 4.4 List (2003) *“Does Market Experience Eliminate Market Anomalies?”*, Quarterly Journal of Economics, 118(1): 41– 71.
- 4.5 Koszegi and Rabin (2006), *“A Model of Reference-Dependent Preferences”*, Quarterly Journal of Economics, 121(4): 1133–1165.
- 4.6 Sydnor, Justin. 2010. *“(Over) insuring Modest Risks.”* American Economic Journal: Applied Economics, 2(4): 177-99
- 4.7 Charness and Rabin (2002) *“Understanding Social Preferences with Simple Tests”* Quarterly Journal of Economics, 117(3): 817–869.
- 4.8 Lazear, Edward P., Ulrike Malmendier, and Roberto A. Weber. (2012). *“Sorting in Experiments with Application to Social Preferences.”* American Economic Journal: Applied Economics, 4(1): 136-63.
- 4.9 DellaVigna, List, Malmendier. (2012). *“Testing for Altruism and Social Pressure in Charitable Giving”*. Quarterly Journal of Economics, 127(1): 1–56.
- 4.10 Rabin (1993). *“Incorporating Fairness into Game Theory and Economics”*, American Economic Review, 83(5): 1281– 1302.
- 4.11 Fehr and Gächter, (2000), *“Fairness and Retaliation: The Economics of Reciprocity”*, Journal of Economic Perspectives, 14(3): 159–181.
- 4.12 Fehr, E. and Schmidt, K. (1999) *“A Theory of Fairness, Competition, and Cooperation”* The Quarterly Journal of Economics, 114(3): 817—868.
- 4.13 Thaler, Richard H. (1988). *“Anomalies: The Ultimatum Game.”* Journal of Economic Perspectives, 2(4): 195-206.
- 4.14 Tversky, A. and Kahneman, D. (1974) *“Judgment under Uncertainty: Heuristics and Biases”*, Science, 185(4): 1124– 1131.
- 4.15 Kahneman, Daniel(2011) *Thinking, fast and slow*. Macmillan.

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