

CENTRAL UNIVERSITY OF PUNJAB

1-Year & 2-Year M.A. Economics Curriculum Structure

ACADEMIC SESSION

2025-26

Department of Economic Studies

School of Social Sciences

Important Features

- 1.** M.A. Economics programme of the department offers both 1-year and 2-year post-graduate degrees.
- 2.** In the 1-year M.A. Economics programme, the learner can opt for any one of the following categories:
 - i)** 1-year M.A. Economics programme with 2-semester research;
 - ii)** 1-year M.A. Economics programme with 1-semester coursework and 1-semester research;
 - iii)** 1-year M.A. Economics programme with 2-semester coursework.
- 3.** In the 2-year M.A. Economics programme, the learner can opt for any one of the following categories:
 - i)** 2-year M.A. Economics programme with 2-semester coursework and 2-semester research;
 - ii)** 2-year M.A. Economics programme with 3-semester coursework and 1-semester research;
 - iii)** 2-year M.A. Economics programme with 4-semester coursework.
- 4.** In the 2-year M.A. Economics programme, there is the provision of exiting the programme after the successful completion of 1st year with PG Diploma in Economics. Similarly, there is the provision of taking admission into the 2nd year having qualified either in PG Diploma in Economics or 4-year UG subject to satisfying the admission rule of the UGC/University.
- 5.** In all of the above categories, the department offers discipline core courses, discipline elective courses, generic electives/interdisciplinary electives, ability enhancement courses, skill enhancement courses, value added courses, and dissertation/internship/apprenticeship based research.
- 6.** In the all of the above categories, the skill enhancement courses are upto 50% of the total credit requirements.
- 7.** In all of the above categories, the evaluation of course learning outcomes is as per university rules.
- 8.** The learners have flexibility to opt for MOOCs against elective courses, interdisciplinary courses, and value added courses up to 40 % of the total credit requirements.

EVALUATION PATTERN OF COURSES

Department follows Outcome Based Education (OBE) in all its teaching-learning and evaluation process in line with the recommendations of NEP-2020. The evaluation process should follow the assessment of learning outcomes as per Bloom's taxonomy (knowledge, understanding, application, analysis, synthesis and evaluation).

Core and Discipline specific elective courses			IDC, VAC, AEC, SEC etc. (max. of 02 credits)	
Pattern	Marks	Type	Marks	Type
Internal Assessment	25	Quiz, short-answer type, assignment, term paper, open book examination, presentation etc.	-	-
Mid-semester test (MST)	25	Short-type and Essay type - each question shall carry maximum weightage of 05 marks.	50	Objective & descriptive types
End-semester Exam. (ESE)	50	Objective type (30%) – each question shall carry weightage of upto 02 marks depending on the level of difficulty. Descriptive type (70%) – each question shall carry weightage of upto 10 marks.	50	Objective & descriptive types

Note:

(i) the objective type evaluation shall include MCQs, one-word/one-sentence answers etc. The number of questions shall be decided by the teacher; and

(ii) the descriptive type evaluation shall include short answer and essay types of questions. The number of questions shall be decided by the teacher.

EVALUATION PATTERN OF DISSERTATION

Course Learning Outcomes: On completion of this course, learning will be able to:

- CLO1: Identify research gaps on a selected research area
- CLO2: Summarize the findings of different research studies,
- CLO3: Formulate objectives, hypotheses/research questions,
- CLO4: Select appropriate research design and methods of research,
- CLO5: Design tools of data collection, and conduct research,
- CLO6: Develop analytical and logical thinking in the process of conducting research,
- CLO7: Apply the implications of research in generating new knowledge.
- CLO8: Prepare citations and references.

Components of Dissertation

- **Research Proposal:** A standard research proposal is required to be prepared and presented in the department level containing title/topic of research, conceptualization and contextualization of the study, rationale of the study, literature survey and review, research gaps, problem statement, objectives, hypotheses/research questions, materials and methods of research, sampling, tools and methods of data collection, and pilot study (if applicable).
- **Full Dissertation:** Students are required to be involved in data collection, analyses and report writing as per the 'Research Proposal' prepared, and approved in the department level. The structure of dissertation includes Title page, Certificates, Table of Contents, List of Tables, List of Figures, Introduction, Review of literature, Data and Methodology, Results and Discussion, Conclusion, References, Appendices.
- **Note:** Dissertation shall be prepared individually by the students under the guidance of supervisor allotted by the Department. If group dissertation is opted, then maximum 04 students can form a group. However, the contribution of each member must be substantial and all must have full understanding of the entire process of research and research outcomes. Depending on the nature of research and scope of the topic, students can apply multidisciplinary approach in their research. Dissertation work, if requires, can have collaboration with industry and/or any other HEI.

Evaluation of Dissertation Proposal (3rd Sem)

Pattern	Evaluation Method	Weightage
Initial Evaluation by the Supervisor(s)	Dissertation proposal & presentation	50%
Final Evaluation by a committee consisting of Senior most faculty member of the Department and HOD	Dissertation proposal and presentation	50%

Evaluation of Final Dissertation (4th Sem)

Dissertation Part-II: Full Dissertation Report		
Pattern	Marks	Evaluation
Supervisor(s) (continuous evaluation)	50	Regularity of work, mid-term evaluation, report of dissertation, Presentation and Viva-Voce
External subject Expert (may attend the final presentation and viva-voce exam through offline or online mode).	50	Report of Dissertation (25 marks), Presentation (10 marks), novelty/originality (5 marks), & final Viva-Voce (10 marks).

Programme: 2-year M.A. Economics
Category-I: 2-Semester Coursework & 2-Semester Research

SEMESTER-I

Course Code	Course Title	Course Type	L	T	P	Credit
MECO.401	Microeconomics	Core	4	0	0	4
MECO.402	Macroeconomics	Core	4	0	0	4
MECO.403	International Economics	Core	4	0	0	4
MECO.404	Mathematical Economics	SEC	3	0	0	3
MECO.405	Entrepreneurship, Innovation and Skill Development	AEC	2	0	0	2
MECO. ###	<i>Students to choose a course from the list of elective courses given below</i>	Elective	3	0	0	3
MECO. ###	<i>Interdisciplinary Elective (Students to choose a course offered by other Departments in the University)</i>	IDC	2	0	0	2
	Total		22	0	0	22
<i>Two Hours of Remedial Classes shall be offered per week</i>						
List of Discipline Electives (select any one of the following)						
MECO.506	Agricultural Economics	Elective	3	0	0	3
MECO.507	Industrial Economics	Elective	3	0	0	3
MECO.508	Gender Economics	Elective	3	0	0	3
MECO.509	Economics of Healthcare: Theory & Policy	Elective	3	0	0	3
MECO.510	Financial Institutions and Markets	Elective	3	0	0	3
MECO.511	Political Economy of Development	Elective	3	0	0	3
MECO.512	Managerial Economics	Elective	3	0	0	3
MECO.513	Economics of Microfinance	Elective	3	0	0	3
MECO.514	Globalization and Development	Elective	3	0	0	3
MECO.515	Cost-Benefit Analysis in Economics	Elective	3	0	0	3
Interdisciplinary courses (for students of other Departments)						
MECO.516	Basics of Economics	IDC	2	0	0	2
MECO.517	Introduction to Indian Economy	IDC	2	0	0	2
MECO.518	Agricultural Development and Management	IDC	2	0	0	2
MECO.519	Indian Economic Thought	IDC	2	0	0	2

Note-1: AEC: Ability Enhancing Course; SEC: Skill Enhancing Course; **Note-2:** Students can choose a MOOCs course against the elective course/IDC.

SEMESTER-II

Course Code	Course Title	Course Type	L	T	P	Credit
MECO.421	Economics of Growth and Development	Core	4	0	0	4
MECO.422	Statistical Methods for Economics	SEC	3	0	0	3
MECO.521	Basic Econometrics	Core	3	0	0	3
MECO.522	Research Methodology in Economics	SEC	3	0	0	3
MECO. ###	<i>Students to choose a course from the list of elective courses given below</i>	Elective	3	0	0	3
MECO. ###	<i>Students to choose a course from the value based courses offered in the University</i>	VAC	2	0	0	2
Total			18	0	0	18
Two Hours of Remedial Classes shall be offered per week						
List of Discipline Electives (Select any one of the following)						
MECO.523	Money and Banking	Elective	3	0	0	3
MECO.524	Indian Economic Development and Policy	Elective	3	0	0	3
MECO.525	Rural Development and Policies	Elective	3	0	0	3
MECO.526	Economics of Innovation	Elective	3	0	0	3
MECO.527	International Trade and Investment	Elective	3	0	0	3
MECO.528	Punjab Economy	Elective	3	0	0	3
MECO.529	Population Studies	Elective	3	0	0	3
MECO.530	Advanced Econometrics	Elective	3	0	0	3
MECO.531	Welfare Economics	Elective	3	0	0	3
MECO.532	Economics of Human Development and Knowledge Economy	Elective	3	0	0	3
List of Value Added Courses						
MECO.533	Data Analysis Using Excel	VAC	2	0	0	2
MECO.534	Data Analysis Using SPSS	VAC	2	0	0	2
MECO.535	Data Analysis Using STATA	VAC	2	0	0	2
MECO.536	Data Analysis Using Eviews	VAC	2	0	0	2
MECO.537	Decision Making Skills	VAC	2	0	0	2

Note-1: Students can choose a MOOCs course against the elective course / VAC course

SEMESTER-III

Course Code	Course Title	Course Type	L	T	P	Credit
MECO.599.1	Dissertation/Internship/Apprenticeship	SEC	0	0	0	20

SEMESTER-IV

Course Code	Course Title	Course Type	L	T	P	Credit
MECO.599.2	Dissertation/Internship/Apprenticeship	SEC	0	0	0	40

Programme: 2-year M.A. Economics
Category-II: 3-Semester Coursework & 1-Semester Research

SEMESTER-I

Course Code	Course Title	Course Type	L	T	P	Credit
MECO.401	Microeconomics	Core	4	0	0	4
MECO.402	Macroeconomics	Core	4	0	0	4
MECO.403	International Economics	Core	4	0	0	4
MECO.404	Mathematical Economics	SEC	3	0	0	3
MECO.405	Entrepreneurship, Innovation and Skill Development	AEC	2	0	0	2
MECO. ###	<i>Students to choose a course from the list of elective courses given below</i>	Elective	3	0	0	3
MECO. ###	<i>Interdisciplinary Elective (Students to choose a course offered by other Departments in the University)</i>	IDC	2	0	0	2
	Total		22	0	0	22
<i>Two Hours of Remedial Classes shall be offered per week</i>						
List of Discipline Electives (select any one of the following)						
MECO.506	Agricultural Economics	Elective	3	0	0	3
MECO.507	Industrial Economics	Elective	3	0	0	3
MECO.508	Gender Economics	Elective	3	0	0	3
MECO.509	Economics of Healthcare: Theory & Policy	Elective	3	0	0	3
MECO.510	Financial Institutions and Markets	Elective	3	0	0	3
MECO.511	Political Economy of Development	Elective	3	0	0	3
MECO.512	Managerial Economics	Elective	3	0	0	3
MECO.513	Economics of Microfinance	Elective	3	0	0	3
MECO.514	Globalization and Development	Elective	3	0	0	3
MECO.515	Cost-Benefit Analysis in Economics	Elective	3	0	0	3
Interdisciplinary courses (for students of other Departments)						
MECO.516	Basics of Economics	IDC	2	0	0	2
MECO.517	Introduction to Indian Economy	IDC	2	0	0	2
MECO.518	Agricultural Development and Management	IDC	2	0	0	2
MECO.519	Indian Economic Thought	IDC	2	0	0	2

Note-1: AEC: Ability Enhancing Course; SEC: Skill Enhancing Course; **Note-2:** Students can choose a MOOCs course against the elective course/IDC.

SEMESTER-II

Course Code	Course Title	Course Type	L	T	P	Credit
MECO.421	Economics of Growth and Development	Core	4	0	0	4
MECO.422	Statistical Methods for Economics	SEC	3	0	0	3
MECO.521	Basic Econometrics	Core	3	0	0	3
MECO.522	Research Methodology in Economics	SEC	3	0	0	3
MECO. ###	<i>Students to choose a course from the list of elective courses given below</i>	Elective	3	0	0	3
MECO. ###	<i>Students to choose a course from the value based courses offered in the University</i>	VAC	2	0	0	2
	Total		18	0	0	18
Two Hours of Remedial Classes shall be offered per week						
List of Discipline Electives (Select any one of the following)						
MECO.523	Money and Banking	Elective	3	0	0	3
MECO.524	Indian Economic Development and Policy	Elective	3	0	0	3
MECO.525	Rural Development and Policies	Elective	3	0	0	3
MECO.526	Economics of Innovation	Elective	3	0	0	3
MECO.527	International Trade and Investment	Elective	3	0	0	3
MECO.528	Punjab Economy	Elective	3	0	0	3
MECO.529	Population Studies	Elective	3	0	0	3
MECO.530	Advanced Econometrics	Elective	3	0	0	3
MECO.531	Welfare Economics	Elective	3	0	0	3
MECO.532	Economics of Human Development and Knowledge Economy	Elective	3	0	0	3
List of Value Added Courses						
MECO.533	Data Analysis Using Excel	VAC	2	0	0	2
MECO.534	Data Analysis Using SPSS	VAC	2	0	0	2
MECO.535	Data Analysis Using STATA	VAC	2	0	0	2
MECO.536	Data Analysis Using Eviews	VAC	2	0	0	2
MECO.537	Decision Making Skills	VAC	2	0	0	2

Note-1: Students can choose a MOOCs course against the elective course / VAC course

SEMESTER-III

Course Code	Course Title	Course Type	L	T	P	Credit
MECO.551	Economics of Social Sector	Core	4	0	0	4
MECO.552	Public Economics	Core	4	0	0	4
MECO.553	Environmental Economics and Policy	Core	4	0	0	4
MECO.554	Applied Econometrics	AEC	2	0	0	2
MECO.555	Evaluation of Investment Projects	SEC	3	0	0	3
MECO. ###	Students to choose a course from the list of elective courses given below	Elective	3	0	0	3
	Total		20	0	0	20

Two Hours of Remedial Classes shall be offered per week

List of Discipline Electives (select any one of the following)						
MECO.556	Economics of Education	Elective	3	0	0	3
MECO.557	Innovation and Entrepreneurship	Elective	3	0	0	3
MECO.558	Social Survey Methods	Elective	3	0	0	3
MECO.559	Economics of Infrastructure	Elective	3	0	0	3
MECO.560	Labour Economics	Elective	3	0	0	3
MECO.561	Economics of Information Technology	Elective	3	0	0	3
MECO. 562	World Economy	Elective	3	0	0	3
MECO.563	Budgetary Theory and Practice	Elective	3	0	0	3
MECO.564	Energy Economics and Policy	Elective	3	0	0	3
MECO.565	Poverty and Income Distribution	Elective	3	0	0	3
MECO.566	Regional Economic Integration	Elective	3	0	0	3

Note-1: AEC: Ability Enhancing Courses; SEC: Skill Enhancing Courses; VAC: Value Added Courses

Note-2: Students can choose in a MOOCs course against the elective course

SEMESTER-IV

Course Code	Course Title	Course Type	L	T	P	Credit
MECO.599	Dissertation/Internship/Apprenticeship	SEC	0	0	0	20

Note: SEC: Skill Enhancing Course

Programme: 2-year M.A. Economics
Category-III: 4-Semester Coursework

SEMESTER-I

Course Code	Course Title	Course Type	L	T	P	Credit
MECO.401	Microeconomics	Core	4	0	0	4
MECO.402	Macroeconomics	Core	4	0	0	4
MECO.403	International Economics	Core	4	0	0	4
MECO.404	Mathematical Economics	SEC	3	0	0	3
MECO.405	Entrepreneurship, Innovation and Skill Development	AEC	2	0	0	2
MECO. ###	<i>Students to choose a course from the list of elective courses given below</i>	Elective	3	0	0	3
MECO. ###	<i>Interdisciplinary Elective (Students to choose a course offered by other Departments in the University)</i>	IDC	2	0	0	2
	Total		22	0	0	22
<i>Two Hours of Remedial Classes shall be offered per week</i>						
List of Discipline Electives (select any one of the following)						
MECO.506	Agricultural Economics	Elective	3	0	0	3
MECO.507	Industrial Economics	Elective	3	0	0	3
MECO.508	Gender Economics	Elective	3	0	0	3
MECO.509	Economics of Healthcare: Theory & Policy	Elective	3	0	0	3
MECO.510	Financial Institutions and Markets	Elective	3	0	0	3
MECO.511	Political Economy of Development	Elective	3	0	0	3
MECO.512	Managerial Economics	Elective	3	0	0	3
MECO.513	Economics of Microfinance	Elective	3	0	0	3
MECO.514	Globalization and Development	Elective	3	0	0	3
MECO.515	Cost-Benefit Analysis in Economics	Elective	3	0	0	3
Interdisciplinary courses (for students of other Departments)						
MECO.516	Basics of Economics	IDC	2	0	0	2
MECO.517	Introduction to Indian Economy	IDC	2	0	0	2
MECO.518	Agricultural Development and Management	IDC	2	0	0	2
MECO.519	Indian Economic Thought	IDC	2	0	0	2

Note-1: AEC: Ability Enhancing Course; SEC: Skill Enhancing Course; **Note-2:** Students can choose a MOOCs course against the elective course/IDC.

SEMESTER-II

Course Code	Course Title	Course Type	L	T	P	Credit
MECO.421	Economics of Growth and Development	Core	4	0	0	4
MECO.422	Statistical Methods for Economics	SEC	3	0	0	3
MECO.521	Basic Econometrics	Core	3	0	0	3
MECO.522	Research Methodology in Economics	SEC	3	0	0	3
MECO. ###	<i>Students to choose a course from the list of elective courses given below</i>	Elective	3	0	0	3
MECO. ###	<i>Students to choose a course from the value based courses offered in the University</i>	VAC	2	0	0	2
	Total		18	0	0	18
Two Hours of Remedial Classes shall be offered per week						
List of Discipline Electives (Select any one of the following)						
MECO.523	Money and Banking	Elective	3	0	0	3
MECO.524	Indian Economic Development and Policy	Elective	3	0	0	3
MECO.525	Rural Development and Policies	Elective	3	0	0	3
MECO.526	Economics of Innovation	Elective	3	0	0	3
MECO.527	International Trade and Investment	Elective	3	0	0	3
MECO.528	Punjab Economy	Elective	3	0	0	3
MECO.529	Population Studies	Elective	3	0	0	3
MECO.530	Advanced Econometrics	Elective	3	0	0	3
MECO.531	Welfare Economics	Elective	3	0	0	3
MECO.532	Economics of Human Development and Knowledge Economy	Elective	3	0	0	3
List of Value Added Courses						
MECO.533	Data Analysis Using Excel	VAC	2	0	0	2
MECO.534	Data Analysis Using SPSS	VAC	2	0	0	2
MECO.535	Data Analysis Using STATA	VAC	2	0	0	2
MECO.536	Data Analysis Using Eviews	VAC	2	0	0	2
MECO.537	Decision Making Skills	VAC	2	0	0	2

Note-1: SEC: Skill Enhancing Courses; VAC: Value Added Courses

Note-2: Students can choose a MOOCs course against the elective course / VAC course

SEMESTER-III

Course Code	Course Title	Course Type	L	T	P	Credit
MECO.551	Economics of Social Sector	Core	4	0	0	4
MECO.552	Public Economics	Core	4	0	0	4
MECO.553	Environmental Economics and Policy	Core	4	0	0	4
MECO.554	Applied Econometrics	AEC	2	0	0	2
MECO.555	Evaluation of Investment Projects	SEC	3	0	0	3
MECO. ###	Students to choose a course from the list of elective courses given below	Elective	3	0	0	3
	Total		20	0	0	20
Two Hours of Remedial Classes shall be offered per week						
List of Discipline Electives (select any one of the following)						
MECO.556	Economics of Education	Elective	3	0	0	3
MECO.557	Innovation and Entrepreneurship	Elective	3	0	0	3
MECO.558	Social Survey Methods	Elective	3	0	0	3
MECO.559	Economics of Infrastructure	Elective	3	0	0	3
MECO.560	Labour Economics	Elective	3	0	0	3
MECO.561	Economics of Information Technology	Elective	3	0	0	3
MECO. 562	World Economy	Elective	3	0	0	3
MECO.563	Budgetary Theory and Practice	Elective	3	0	0	3
MECO.564	Energy Economics and Policy	Elective	3	0	0	3
MECO.565	Poverty and Income Distribution	Elective	3	0	0	3
MECO.566	Regional Economic Integration	Elective	3	0	0	3

Note-1: AEC: Ability Enhancing Courses; SEC: Skill Enhancing Courses;

Note-2: Students can choose in a MOOCs course against the elective course

SEMESTER-IV

Course Code	Course Title	Course Type	L	T	P	Credit
MECO.580	Applied Microeconomics	Core	4	0	0	4
MECO.581	Applied Macroeconomics	Core	4	0	0	4
MECO.582	Time Series Econometrics	SEC	4	0	0	4
MECO.583	Econometrics of Panel Data	SEC	4	0	0	4
MECO.596	Industrial/Field Visits	AEC	0	0	1	1
MECO. ###	Students to choose a course from the list of elective courses given below	Elective	3	0	0	3
	Total		20	0	0	20
Two Hours of Remedial Classes shall be offered per week						
List of Discipline Electives (select any one of the following)						
MECO.584	Resource Economics	Elective	3	0	0	3
MECO.585	Financial Economics	Elective	3	0	0	3
MECO.586	Economics of Global Climate Change	Elective	3	0	0	3
MECO.587	Urban Economics	Elective	3	0	0	3
MECO.588	Institutional Economics	Elective	3	0	0	3
MECO.589	Sustainable Development	Elective	3	0	0	3
MECO. 590	Economics of Insurance	Elective	3	0	0	3
MECO. 591	Economics and Law	Elective	3	0	0	3
MECO. 592	Economics of Public-Private Partnership	Elective	3	0	0	3
MECO. 593	Economics of Tourism	Elective	3	0	0	3
MECO.594	Applied Environmental Economics	Elective	3	0	0	3

Note-1: AEC: Ability Enhancing Courses; SEC: Skill Enhancing Courses;

Note-2: Students can choose in a MOOCs course against the elective course.

Programme: 1-year M.A. Economics

Category-I: 2-Semester Research

SEMESTER-I

Course Code	Course Title	Course Type	L	T	P	Credit
MECO.599.1	Dissertation/Internship/Apprenticeship	SEC	0	0	0	20

Note-I: SEC: Skill Enhancing Courses;

SEMESTER-II

Course Code	Course Title	Course Type	L	T	P	Credit
MECO.599.2	Dissertation/Internship/Apprenticeship	SEC	0	0	0	20

Note-I: SEC: Skill Enhancing Courses;

Programme: 1-year M.A. Economics**Category-II:** 1-Semester Coursework and 1-Semester Research**SEMESTER-I**

Course Code	Course Title	Course Type	L	T	P	Credit
MECO.551	Economics of Social Sector	Core	4	0	0	4
MECO.552	Public Economics	Core	4	0	0	4
MECO.553	Environmental Economics and Policy	Core	4	0	0	4
MECO.554	Applied Econometrics	AEC	2	0	0	2
MECO.555	Evaluation of Investment Projects	SEC	3	0	0	3
MECO. ###	Students to choose a course from the list of elective courses given below	Elective	3	0	0	3
Total			20	0	0	20

Two Hours of Remedial Classes shall be offered per week

List of Discipline Electives (select any one of the following)						
MECO.556	Economics of Education	Elective	3	0	0	3
MECO.557	Innovation and Entrepreneurship	Elective	3	0	0	3
MECO.558	Social Survey Methods	Elective	3	0	0	3
MECO.559	Economics of Infrastructure	Elective	3	0	0	3
MECO.560	Labour Economics	Elective	3	0	0	3
MECO.561	Economics of Information Technology	Elective	3	0	0	3
MECO. 562	World Economy	Elective	3	0	0	3
MECO.563	Budgetary Theory and Practice	Elective	3	0	0	3
MECO.564	Energy Economics and Policy	Elective	3	0	0	3
MECO.565	Poverty and Income Distribution	Elective	3	0	0	3
MECO.566	Regional Economic Integration	Elective	3	0	0	3

Note-1: AEC: Ability Enhancing Courses; SEC: Skill Enhancing Courses;

Note-2: Students can choose in a MOOCs course against the elective course

SEMESTER-II

Course Code	Course Title	Course Type	L	T	P	Credit
MECO.599	Dissertation/Internship/Apprenticeship	SEC	0	0	0	20

Note-1: SEC: Skill Enhancing Courses

Programme: 1-year M.A. Economics
Category-III: 2-Semester Coursework

SEMESTER-I

Course Code	Course Title	Course Type	L	T	P	Credit
MECO.551	Economics of Social Sector	Core	4	0	0	4
MECO.552	Public Economics	Core	4	0	0	4
MECO.553	Environmental Economics and Policy	Core	4	0	0	4
MECO.554	Applied Econometrics	AEC	2	0	0	2
MECO.555	Evaluation of Investment Projects	SEC	3	0	0	3
MECO. ###	Students to choose a course from the list of elective courses given below	Elective	3	0	0	3
	Total		20	0	0	20
<i>Two Hours of Remedial Classes shall be offered per week</i>						
List of Discipline Electives (select any one of the following)						
MECO.556	Economics of Education	Elective	3	0	0	3
MECO.557	Innovation and Entrepreneurship	Elective	3	0	0	3
MECO.558	Social Survey Methods	Elective	3	0	0	3
MECO.559	Economics of Infrastructure	Elective	3	0	0	3
MECO.560	Labour Economics	Elective	3	0	0	3
MECO.561	Economics of Information Technology	Elective	3	0	0	3
MECO. 562	World Economy	Elective	3	0	0	3
MECO.563	Budgetary Theory and Practice	Elective	3	0	0	3
MECO.564	Energy Economics and Policy	Elective	3	0	0	3
MECO.565	Poverty and Income Distribution	Elective	3	0	0	3
MECO.566	Regional Economic Integration	Elective	3	0	0	3

Note-1: AEC: Ability Enhancing Courses; SEC: Skill Enhancing Courses; VAC: Value Added Courses

Note-2: Students can choose in a MOOCs course against the elective course

SEMESTER-II

Course Code	Course Title	Course Type	L	T	P	Credit
MECO.580	Applied Microeconomics	Core	4	0	0	4
MECO.581	Applied Macroeconomics	Core	4	0	0	4
MECO.582	Time Series Econometrics	SEC	4	0	0	4
MECO.583	Econometrics of Panel Data	SEC	4	0	0	4
MECO.596	Industrial/Field Visits	AEC	0	0	1	1
MECO. ###	Students to choose a course from the list of elective courses given below	Elective	3	0	0	3
	Total		20	0	0	20
Two Hours of Remedial Classes shall be offered per week						
List of Discipline Electives (select any one of the following)						
MECO.584	Resource Economics	Elective	3	0	0	3
MECO.585	Financial Economics	Elective	3	0	0	3
MECO.586	Economics of Global Climate Change	Elective	3	0	0	3
MECO.587	Urban Economics	Elective	3	0	0	3
MECO.588	Institutional Economics	Elective	3	0	0	3
MECO.589	Sustainable Development	Elective	3	0	0	3
MECO. 590	Economics of Insurance	Elective	3	0	0	3
MECO. 591	Economics and Law	Elective	3	0	0	3
MECO. 592	Economics of Public-Private Partnership	Elective	3	0	0	3
MECO. 593	Economics of Tourism	Elective	3	0	0	3
MECO.594	Applied Environmental Economics	Elective	3	0	0	3

Note-1: AEC: Ability Enhancing Courses; SEC: Skill Enhancing Courses;

Note-2: Students can choose in a MOOCs course against the elective course.

CENTRAL UNIVERSITY OF PUNJAB

M.A. Economics

Syllabus

Batch – 2025-27

Department of Economic Studies

School of Social Sciences

Graduate Attributes

The graduates of M.A. Economics programme through their value embedded conduct, enthusiastic mindset, insightful critical thinking, keen observation, and strong analytical skills would be able to:

- Critically appraise the existing state of knowledge,
- Significantly comprehend the current state of events across the world,
- Efficiently evaluate and put forward the policies, strategies and programmes for the benefits of the society at large, and
- Appropriately provide solutions to the persistent socio-economic problems at micro and macro levels.

Programme Learning Outcomes

At the end of the M.A. Economics Programme, the learners will be intelligent economic thinkers of socio-economic values, critical and strategic analysers of traditional knowledge systems in the present context, ethical and impactful researchers, economists, and policy makers.

Multiple Entry and Exit

1. Entry/Admission into the 2-year M.A. Economics programme, shall be made twice during the entire duration of study – once at the beginning of the 1st semester and then, at the beginning of the 3rd semester.
2. For entry/Admission into the 2-year M.A. Economics programme shall be as per the university rule.
3. For entry/Admission at the beginning of the 3rd semester of 2-year M.A. Economics programme shall be called lateral entry. For such entry, students having successfully passed 1-year Post-Graduate Diploma in Economics or its relevant/allied subjects with at least 55% marks or equivalent CGPA (5% relaxation for SC, ST, OBC, PwD candidates) from recognized Indian/Foreign Universities/Institutions etc. shall be eligible. This entry/admission decision shall be based on the earned credits (36-40 credits in PG Diploma) and proficiency test records.
4. The curriculum structure of the 2-year M.A. Economics programme has been designed by synchronizing discipline specific core and elective courses, interdisciplinary courses, ability and skill enhancing courses such that student(s) wishing to exit the programme after successful completion of 1st year can be awarded Post-Graduate Diploma in Economics by the university. At this exit point, these students shall have the ability and skill to take up employment/self-employment opportunities in data analysis, model building and estimation, decision making etc.

SEMESTER – I

Course Name: Microeconomics

Course Code: MECO.401

Course Learning Outcomes (CLO):

L	T	P	Credit
4	0	0	4

On completion of this course, learners will be able to:

- CLO1: Accrue knowledge on basics of consumers optimization behaviour
- CLO2: Understand theories of production & cost, and producer's optimization process
- CLO3: Distinguish between two extreme forms of market and their price determination process
- CLO4: Familiar with a few recent market models and output & pricing behaviour of firms
- CLO5: Comprehend the pricing methods and strategies of firms
- CLO6: understand the theories of factor pricing
- CLO7: familiar with the general equilibrium in microeconomics
- COL8: accrue knowledge on welfare economics

Units/Hours	Contents	Mapping with CLO
I 15 Hours	Theory of Consumer Behaviour: Indirect utility functions and Duality theorem; The Lump Sum Principle; The revealed Preference Approach: WARP and SARP; Fair Games and Expected Utility Hypothesis; Measuring Risk Aversion; The Portfolio Problem; The State-Preference approach to Choice under Uncertainty; Economics of Information.	CLO1
	Theory of Production and Costs: Duality in Production; Production under Uncertainty; Modern theory of Costs: Short-run and Long-run, Saucer shape, L-shaped scale curve; Engineering cost (j-shaped) curves.	CLO2
II 15 Hours	Price-Output under Perfect Competition and Monopoly: Equilibrium under Perfect Competition: Supply curves of the Firm and Industry; Dynamic Changes and Industry Equilibrium. Monopoly: Firm's Equilibrium; Predictions in Dynamic Changes, Multi-plant Monopolist; Regulated Monopoly (Taxation, and Price Regulation).	CLO3
	Price-Output under Monopolistic Competition and Oligopoly: Chamberlin's model: with entry and price competitions and equilibrium of firms; Concept of Excess capacity; Non-collusive Oligopoly: Cournot's model, Bertrand's model, Chamberlin's model, Stackelberg's model and Kinked demand Model of oligopoly; Product differentiation and selling cost; Collusive Oligopoly: Collusive Oligopoly: Cartels: Market sharing and joint profit maximization; Price leadership: Low-cost, Dominant firm, and Barometric price Leaderships; Basing Point Pricing System.	CLO4
III 15 Hours	Marginalist Controversy and Average Cost Pricing: Marginalist Controversy and Average Cost Pricing: Hall and Hitch Report and Full-Cost Pricing; Gordon's Attack; The Mark-Up Rule; Bain's Limit-Pricing theory; Recent developments in Limit Pricing Theory: Sylos-Labini, Franco Modigliani, Bhagwati, Pahigian models; Managerial Theories of Firm: Baumol, Marris and Williamson Models of the Firm.	CLO5
	Factor Pricing and Income Distribution: Adding up Problem and Product Exhaustion Theorem. Determination of rents & wages through negotiations and bargains.	CLO6
IV 15 Hours	General Equilibrium: Interdependence in the Economy; The Walrasian System; Existence, Uniqueness and Stability of an Equilibrium; Path to General Equilibrium; Two-factor, two-commodity & two consumer General Equilibrium System.	CLO7
	Welfare Economics: Pareto Optimality; Kaldor-Hicks Criteria, Bergson Criteria; Maximization of Social Welfare; Theory of Second Best.	CLO8

	Arrow's Impossibility theorem; Equilibrium of markets through mutual interdependence, and maximization of Society's welfare through optimal allocation of resources.	
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Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies.

Suggested Readings:

1. Snyder, C. and W. Nicholson. (2010). *Fundamentals of Microeconomics*, 10th Edition, Cengage Learning-New Delhi.
2. Jehle, G. A. And P. J. Reny. (2011). *Advanced Microeconomic Theory*, 3rd Edition, Pearson-New Delhi.
3. Henderson, J.M., and Quandt, R.E. (2003). *Microeconomic Theory: A Mathematical Approach*. 3rd Edition, Tata McGraw Hill, New Delhi.
4. Pindyck, R.S. D.L. Rubinfeld, P.L. Mehta. (2009). *Microeconomics*, 7th Edition, Pearson, New Delhi.
5. Koutsoyiannis, A. (1979). *Modern Microeconomics* (2nd edition). Macmillan Press, London.
6. Varian, H. (2010). *Intermediate Microeconomic*. 8th Edition New York: W.W Norton.
7. Varian, H. (1992). *Microeconomic Analysis*. 3rd Edition New York: W.W Norton.
8. Mankiw, N. G. (2009). *Principles of Microeconomics*. 5th Edition. South-Western, Cengage Learning, USA.
9. Samuelson, P.A. and Nordhaus, W.O. (1998). *Economics* (16th Edition). New Delhi: Tata McGraw Hill.
10. Stigler, G. (1996). *Theory of Price* (4th Edition). New Delhi: Prentice Hall of India.
11. Robinson Joan (1969), *The Economics of Imperfect Competition* (2nd Edition), Palgrave Macmillan, UK.

Web links:

1. <https://durhamtech.libguides.com/microeconomics/web>
2. <https://lumenlearning.com/courses/microeconomics/>
3. <https://www.edx.org/learn/microeconomics>

Course Name: Macroeconomics

Course Code: MECO.402

L	T	P	Credit
4	0	0	4

Course Learning Outcomes (CLO): On completion of this course, learners will be able to:

CLO1: accrue knowledge on the theories of income determination.

CLO2: Understand income and consumption relationship.

CLO3: comprehend the theories of investment.

CLO4: know the theories of business cycle and its analyses.

CLO5: Understand and able to evaluate macroeconomic policies in the IS-LM framework.

CLO6: recognize the complex relationship between inflation and unemployment.

CLO7: comprehend the Micro-foundations of Macroeconomics.

CLO8: Understand the dynamics of macroeconomic disequilibria.

Units/Hours	Contents	Mapping with CLO
I 15 Hours	Theories of Income Determination: Classical and Keynes' Theory; Keynesian concepts of Multiplier;	CLO1
	Theories of Consumption Function: Empirical Evidence on Short-run and Long-run Consumption Functions; Consumption Puzzle; Income-Consumption Relationship – Absolute Income, Relative Income, Permanent Income, Life Cycle Hypotheses and Intertemporal Budgeted Constraints of Consumption; The Random-Walk Hypothesis.	CLO2

II 15 Hours	Theories of Investment: NPV vs. IRR; Marginal Efficiency of Capital and Rate of Interest; Marginal Efficiency of Investment and Level of Investment; Keynesian Theory of Investment Decisions, Profits and Accelerator Theories of Investment; Lags in Investment, Tobin's q Theory of Investment; Greater Fool Theory, Short Interest Theory, and Odd Lot Theory.	CLO3
	Theories of Business Cycle: Pure Monetary Theory; Monetary over investment theory; Schumpeter's innovation theory; Samuelson's Multiplier-accelerator interaction theory; Hicks' trade cycle theory; Real Business Cycle Theory; Real World Cases.	CLO4
III 15 Hours	Neo-Classical and Keynesian Synthesis: Neo-classical and Keynesian views on Interest Rate Determination; The Basic IS-LM Model; Extension of IS-LM Model with Govt. Sector; Relative effectiveness of Monetary and Fiscal Policies; Extension of IS-LM Model with Labour Market and Flexible Prices – Keynes and Pigou effects; Extension of IS-LM Model with Foreign Sector; Monetary and Fiscal Policy in the Open Economy: The Mundell-Fleming Model.	CLO5
	Inflation and Unemployment: Theories of Inflation, Structuralist Approaches to inflation; Phillips curve hypothesis – Short-run and Long-run Philips Curve – Natural Rate of Unemployment – Non-Accelerating Inflation Rate of Unemployment; Theories of Unemployment – A Generic Efficiency Wage Model, Shapiro-Stiglitz Model, Contracting Models, Search and Matching Models.	CLO6
IV 15 Hours	Rational Expectations and Supply-Side Model: The New Classical Critique of Micro Foundations; The New Classical Approach - Rational Expectations Hypothesis: Imperfect Information, Nominal Money and Output – Asset Bubbles, Multiple Equilibria, Sunspots and Cycles; Supply-side Economics – Laffer Curve; Working of Supply-side Economics.	CLO7
	Disequilibrium Macroeconomics: Features of Disequilibrium Economics; Disequilibrium Models of Clower, Barro-Grossman, Malinvaud and Benassy.	CLO8

Transaction Mode: Lecture, case study, blended learning, problem solving, discussion & demonstration, self-study.

Suggested Readings:

1. Acemoglu, D. (2016). *Macroeconomics*, New Delhi, Pearson education India.
2. Blanchard, O. (2012). *Macroeconomics*. (4th edition), New Delhi, Pearson Education.
3. Branson, W. H. (2014). *Macroeconomics: Theory and policy*, (3rd edition), New Delhi, East-West press Pvt. Ltd.
4. Dornbusch, R.; Fisher, S. and Startz, R. (2015). *Macroeconomics*, (11th edition), New Delhi, Tata McGraw hill education India Pvt. Ltd.
5. Froyen, R. T. (2012). *Macroeconomics: theories and policies*. (8th edition), New Delhi, Pearson Education.
6. Fuller, Neil (2008). *Principles of macroeconomics*, Delhi, Overseas Press.
7. Gordon, R. J. (2015). *Macroeconomics*, (12th edition), New Delhi Pearson education India Pvt. Ltd.
8. Mankiw, N. G. (2011). *Macroeconomics*, 6th edition, New York, Worth publishers.
9. McConnell, C. R., and Gupta, H. C. (2012). *Introduction to Macroeconomics*. Tata McGraw-Hill Publishing Company.
10. Romer, D. (2012). *Advanced Macroeconomics*, (4th edition), McGraw-Hill.
11. Shapiro, Edward. (2015). *Macroeconomic analysis*, (5th edition), New Delhi, Galgotia publication Pvt. Ltd.

Course Name: International Economics

Course Code: MECO.403

L	T	P	Credit
4	0	0	4

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Explain the various concepts and approaches used in international Economics,
- CLO2: Identify the various problems emerged in international trade,
- CLO3: Distinguish the various approaches in Balance of payments,
- CLO4: Analyze the previous and existing pattern of globalization.

Units/Hours	Contents	Mapping with CLO
I 15 Hours	Theories of International Trade: Absolute Advantage, Comparative Advantage and Opportunity Costs, Heckscher-Ohlin Theory of Trade; Factor Price equalization; Empirical testing of Heckscher Ohlin Theory, New approaches to trade theory: The Product Cycle Theory, Technology Gap Theory; Causes of Emergence and Measurement of Intra-industry Trade. Analysis of various views on causes of trade.	CLO1
	Learning Activities: Brain-storming and Problem Solving	
II 15 Hours	Terms of Trade: Concepts and Measurement; Prebisch and Singer views on terms of trade; Theory of Tariff; Regionalism and Multilateralism; Political Economy of Non-tariff barriers; Various forms of Economic Integration; Questioning the benefits of economic integration: Brexit. EU after Brexit. Peer reviews of different types of regional trade agreements.	CLO2
	Learning Activities: Brain-storming and Problem Solving	
III 15 Hours	Balance of Payments and Adjustments: Concepts and components; Causes of disequilibrium and different approaches: Traditional, Absorption and monetary approach, Process of adjustment in the balance of payment under Gold Standard, Fixed Exchange Rate and Flexible Exchange Rates; Theory of foreign exchange market, exchange trading, arbitrage and market hedging; Foreign trade multiplier; Macroeconomic Crisis and exchange rate. Emergence of cryptocurrency Revisiting the concepts of exchange rate and Balance of payments.	CLO3
	Learning Activities: Brain-storming and Problem Solving	
IV 15 Hours	Collapse of Bretton woods system and emergence of international monetary system (IMF and World Bank): World Trading System, WTO and its impact on different sectors, Globalization: Discontents, Issues for Developing Countries, Emergence of Global value chain, Climate Change and Trade, Issues on Trade in Services (GATS), Trade Negotiations under the WTO: A Historical View, Changing pattern of Trade; Agreement on Agriculture and Doha Round Pattern of Trade during Pandemics. Role of MNCs. The United States in the world economy, Impact of Various Crisis on Trade : Financial Crisis, COVID-19, Russia -Ukraine Crisis, India's Road Map in trade for Viksit Bharat, Peer reviews of various role of various international agencies. USA-China trade war, climate change and trade	CLO4
	Learning Activities: Brain-storming and Problem Solving	

Transaction Mode: Lecture, case study, problem solving, group discussion & demonstration, self-study, blended learning.

Suggested Readings:

1. Bhagwati, J. N. (1998). *International Trade: Selected Readings*. London: McMillan University Press.

2. Copeland, L. (2014). *Exchange Rates and International Finance*. Harlow: Prentice Hall, 2014. Sixth edition [ISBN 978-0273786047].
3. Feenstra, R. (2004). *Advanced International Trade*. Princeton University Press.
4. Francis, C. (2008). *International Economics*, McGraw-Hill Education.
5. Gopinath, G., Helpman, E. And Rogoff, K. (2014). *Handbook of International Economics*, North Holland Publications.
6. James C. and Robert, M. (2004). *International Economics*, John Wiley & Sons. Inc.
7. Jones, R. W. and Kenen, P. B. (2003). *Handbook of International Economics*. (Volume I, II and III). Amsterdam: Elsevier.
8. Kofman, E., and Youngs, G. (2001). *Globalisation: Theory and Practice* (2nd Ed.). London: Pinter.
9. Krugman, P. R. and Obstfeld, M. (2000). *International Economics: Theory and Policy*, Dorling Kindersley (India) Pvt. Ltd.
10. Krugman, P., M. Obstfeld and M. Melitz (2014). *International Economics: Theory and Policy*. Boston, Mass.; London: Pearson/Addison-Wesley. Pearson global edition; tenth edition [ISBN 9781292019550].
11. Mikic, M. (1998). *International Trade*. London: Macmillan Press.
12. Munck, R. (2003). *Globalization and Labour: The New Great Transformation*. Zed Books Ltd. University Press.
13. OECD, Multinational Enterprises (MNEs) in the Global Economy Policy .
14. Sakamoto, Y. (1994). *Global Transformation: Challenges to the State System*. Tokyo: United Nations University Press.
15. Salvatore, D. (2004). *International Economics*. John Wiley and Sons Inc.
16. Sodersten, B. O. and Reed, G. (2008). *International Economics*. London: McMillan.
17. Stiglitz, J. E. (2002). *Globalization and its Discontents*. London: Penguin.
18. World Trade Organization (2022). Climate Change and International Trade retrieved from World Trade Report 2022: Climate change and international trade (wto.org)

Course Name: Mathematical Economics

L	T	P	Credit
3	0	0	3

Course Code: MECO.404

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Formulate and optimize economic functions
- CLO2: Find the time path of changes in economic variables,
- CLO3: Deal with economic variables in larger dimensions, and
- CLO4: Apply linear programming for best allocation of economic resources.

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Static Analysis: Equilibrium analysis in economics – linear partial market equilibrium model, non-linear partial market equilibrium model, general market equilibrium, equilibrium in national income analysis; Linear Models and Matrix Algebra - concept of Matrices and Vectors, Matrix operations, properties of determinants, rank and inverse of matrix; System of linear equations, Solution by Cramer's rule and matrix inverse method, Linear independence and dependence of vectors, characteristic roots and vectors, quadratic forms, Application to market and national income models; Leontief Input-Output models; Limitations of Static Analysis.	CLO1
	Skill Enhancement Activities: Creative thinking and Model Building, Problem Solving, Interpretation and Decision making	

II 12 Hours	Comparative-Static Analysis: The nature of comparative-statics, concept of limit and continuity, rate of change and the derivative, Differentiation of algebraic, exponential, logarithmic, trigonometric, and implicit functions; applications of exponential and logarithmic derivatives, Partial Differentiations, Euler's theorem and total differentials; Applications to comparative-static analysis, Concept of Jacobian determinants, comparative statics of general function models, Limitations of comparative-statics. Optimization: Optimization – a special variety of equilibrium analysis, Maxima and minima of functions of one independent variable, and Maxima and minima of functions of two independent variables with and without constraints; Economic applications, comparative-static aspects of optimization.	CLO2
	Skill Enhancement Activities: Creative thinking and Model Building, Problem Solving, Interpretation and Decision making	
III 11 Hours	Dynamic Analysis: Economic dynamics and integral calculus – indefinite and definite integrals, improper integrals, economic applications of integrals, Domar's Growth model; Differential Equations – first-order linear differential equations, second-order linear differential equations, dynamics of market price, Difference Equations – first-order linear difference equations, dynamic stability of equilibrium, the Cobweb model, second-order linear difference equations, Individual Labour Supply, Lagged Keynesian Macroeconomic Model; Continuous adjustment Keynesian Macroeconomic Model; Duopoly Price Adjustment.	CLO3
	Skill Enhancement Activities: Creative thinking and Model Building, Problem Solving, Interpretation and Decision making	
IV 11 Hours	Mathematical Programming and Game Theory: Linear Programming - Formulation and solution of linear programming problems, simplex and graphical methods, Concept of Duality, Economic interpretation of duality; Non-Linear Programming – the nature of non-linear programming, Kuhn-Tucker conditions, economic applications and limitations of mathematical programming; Game Theory – basic concepts, rule of dominance, Nash equilibrium, Mixed strategies, Zero-sum games and computation, Economic Applications.	CLO4
	Skill Enhancement Activities: Creative thinking and Model Building, Problem Solving, Interpretation and Decision making	

Transaction Mode: Lecture, discussion & demonstration, Problem Solving, Peer and blended learning.

Suggested Readings:

1. Allen, R.G.D. (2016). *Mathematical Analysis for Economics*, New Delhi, Trinity press.
2. Asano, Akhito. (2013). *An Introduction to Mathematics for Economics*. New Delhi, Cambridge university press.
3. Chiang, Alpha C. and Wainwright, Kevin. (2013). *Fundamentals Methods of Mathematical Economics* (4th edition), New Delhi, Tata McGraw Hill education.
4. Harrison, Michael, and Waldron, Patrick. (2011). *Mathematics for Economics and Finance*, London, Routledge.
5. Hoy, Michael, Livernois, J., McKenna, C., Rees, R., and Stengos, R. (2014). *Mathematics for Economics*, (3rd edition), New Delhi, PHI learning, Pvt. Ltd.
6. Pemberton, Malcolm. (2017). *Mathematics for Economics: An Introductory Textbook*, New Delhi, Viva books Pvt. Ltd.
7. Sydsaeter, K., and Hammond, P. (2008). *Essential Mathematics for Economic Analysis*. New Delhi: Pearson Education.
8. Vali, Shapoor. (2014). *Principles of Mathematical Economics*, U.S.A., Atlantic press.

9. Wang, Susheng. (2015). *Mathematical Economics*, 2nd edition, New Jersey, World scientific.
10. Yamane, T. (2012). *Mathematics for Economists*. Literary Licensing, LLC.

Course Name: Entrepreneurship, Innovation and Skill Development

L	T	P	Credit
2	0	0	2

Course Code: MECO.405

Course Learning Outcomes (CLO): On completion of this course, learners will be able to:

- CLO1: Understand the basic concepts of entrepreneur, entrepreneurship and its importance,
- CLO2: Aware of the issues, challenges and opportunities in entrepreneurship,
- CLO3: Develop capabilities of preparing proposals for starting small businesses,
- CLO4: Know the availability of various institutional supports for making a new start-up.

Units/Hours	Contents	Mapping with CLO
I 08 hours	Introduction to entrepreneur and entrepreneurship: Characteristics of an entrepreneur; Characteristics of entrepreneurship; entrepreneurial traits and skills; innovation and entrepreneurship; Types of entrepreneurial ventures; enterprise and society in Indian context; Importance of women entrepreneurship.	CLO1
	Learning Activities: Brain-storming and Problem Solving	
II 07 Hours	Promotion of a venture: Why to start a small business; How to start a small business; opportunity analysis, external environmental analysis, legal requirements for establishing a new unit, raising of funds, and establishing the venture - Project report preparation – format for a preliminary project report, format for a detailed/final project report.	CLO2
	Learning Activities: Brain-storming and Problem Solving	
III 08 Hours	Innovation: Theories, National Innovation System, Firm and market characteristics, Innovation and Intellectual property rights	CLO3
	Learning Activities: Brain-storming and Problem Solving	
IV 07 Hours	Skill Development: Types of skill development, Entrepreneurial Imagination and Creativity; Skill development programs, Skills for start-up ecosystem in India.	CLO4
	Learning Activities: Brain-storming and Problem Solving	

Transaction Mode: Lecture, problem solving, group discussion, practical sessions, blended learning, self-study.

Suggested Readings:

1. Arora, Renu. (2008). *Entrepreneurship and Small Business*, Dhanpat Rai & Sons Publications.
2. Chandra, Prasanna. (2018). *Project Preparation, Appraisal, Implementation*, Tata McGraw Hills.
3. Desai, Vasant. (2019). *Management of a Small Scale Industry*, Himalaya Publishing House.
4. Jain, P. C. (2015). *Handbook of New Entrepreneurs*, Oxford University Press.
5. Srivastava, S. B. (2009). *A Practical Guide to Industrial Entrepreneurs*, Sultan Chand & Sons.

Course Name: Agricultural Economics

L	T	P	Credit
3	0	0	3

Course Code: MECO.506

Course Learning Outcomes (CLO): On completion of this course, learners will be able to:

- CLO1: Explain the various concepts and approaches used in Agricultural Economics,
- CLO2: Understand dynamics of agricultural production and productivity,
- CLO3: Understand dynamics of agricultural marketing in India,
- CLO4: Learn role of organizations for agricultural development and strategies for revival of agriculture and rural economy of India.

Units/Hours	Contents	Mapping
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		with CLO
I 12 Hours	Agricultural Economics: Meaning, Scope and Role in economic development; Interface between Agriculture and Industry; Land Reforms; Agriculture Development in Planning Periods and recent initiatives by NITI Aayog; Green Revolution: Implementation and Impacts; Agrarian Crises and Farmer Suicide; Agricultural Diversification.	CLO1
	Learning Activities: Peer review of agrarian reforms and policies	
II 11 Hours	Trends of Agricultural Production in India: Growth, Productivity and Regional Disparities in Indian Agriculture; Farm Size and Productivity Relationships; Risk and Uncertainty in Agriculture, Capital Formation in Agriculture; WTO and Subsidies in Indian agriculture.	CLO2
	Learning Activities: Brain-storming and Problem Solving	
III 12 Hours	Agricultural Marketing: Need/importance, Market Structure, Types of Agricultural markets and their regulation, Major Problems, Costs and Efficiency in the markets; Agricultural Marketing Reforms; Innovations in Agricultural Marketing System; Contract Farming (brief introduction); Agricultural Price Policy in India: Minimum Support Price, Fair and Remunerative Price; Market Intervention Scheme	CLO3
	Learning Activities: Brain-storming and Problem Solving	
IV 10 Hours	Public Distribution System (PDS): Structure and functioning; Agricultural Finance/credit: types, role, agencies, problems, policies, Inter-linked Credit Markets; Cooperatives vs. producer companies.	CLO4
	Learning Activities: Brain-storming and Problem Solving	

Transaction Mode: Lecture, case study, problem solving, group discussion & demonstration, field visit, etc.

Suggested Readings

1. Acharya, S.S. and Agarwal, N.L. (2012). *Agricultural Marketing in India.*, New Delhi.
2. Bansil, P.C. (2017). *Economic Problems of Indian Agriculture*, New Delhi.
3. Barkley, A. (2013). *Principles of Agricultural Economics*, Routledge, London.
4. Chand, R. (2012). *Development Policies and Agricultural Markets*. Economic and Political Weekly, 47 (52), 53-63.
5. Chand, R., Prasanna, P. L., & Singh, A. (2011). *Farm size and productivity: Understanding the strengths of smallholders and improving their livelihoods*. Economic and Political Weekly, 46(26), 5-11.
6. Chand, R., S S Raju, S. Garg and L.M. Pandey. (2011). *Instability and Regional variation in Indian Agriculture*, NCAP, New Delhi.
7. Deshpande, R. S., & Arora, S. (Eds.). (2010). *Agrarian crisis and farmer suicides* (Vol. 12).
8. Dev, S. M. and Rao, N.C. (2010). *Agricultural Price Policy, Farm Profitability and Food Security*. Economic and Political Weekly, 45 (26 & 27), 174-182.
9. Gill, A. (2004). *Interlinked Agrarian Credit Markets: Case Study of Punjab*. Economic and Political Weekly, 39 (33), 3741-3751.
10. Govt. of India (Latest). *Agricultural Statistics at a Glance*, Ministry of Agriculture, New Delhi.
11. Govt. of India (various years): Five Year Plans, Planning Commission, New Delhi.
11. Govt. of India (n.d.). Various Reports, Ministry of Agriculture and Farmer's welfare, Government of India, New Delhi.
12. Penson, J.B., Capps, O. and Woodward, R.T. (2018). *Introduction to Agricultural Economics*, Pearson Education, New Delhi.
13. Reddy, S.S. and Ram, P.R. (2000). *Agricultural Finance and Management*, New Delhi.
14. Reddy, S.S. Ram, R. and Sastry, T.V.N., Devi. I.B. (2008). *Agricultural Economics*, Oxford.
15. Reddy, D.N. and Srijit Mishra. (2010). *Agrarian Crisis in India*, (eds.), Oxford University Press.
16. Soni, R.N. and Malhotra, S. (2016). *Leading Issues in Agricultural Economics*, Delhi.
17. Singh, S. and Singla, N. (2011). *Fresh Food Retail Chains in India*.

18. Ullah et. al. (2016). *Farm risks and uncertainties: Sources, impacts and management, Outlook on Agriculture*, 45(3),199–205. Available at <https://journals.sagepub.com/doi/abs/10.1177/0030727016665440>.
19. UNIT 15 *CAPITAL FORMATION IN INDIAN AGRICULTURE*. Available at <http://egyankosh.ac.in/bitstream/123456789/18838/1/Unit-15.pdf>.
20. UNIT 16 *AGRICULTURAL MARKETING IN INDIA*. Available at <http://egyankosh.ac.in/bitstream/123456789/18833/1/Unit-16.pdf>.

Course Name: Industrial Economics

Course Code: MECO. 507

L	T	P	Credit
3	0	0	3

Course Learning Outcomes (CLO): On completion of this course, learners will be able to:

- CLO1: Describe theories of firm, market structure and conduct,
- CLO2: Discuss competition policy and market discrimination,
- CLO3: Analyse prevailing industrial set up, technological change and development,
- CLO4: Critique industries and their environment.

Units/Hours	Contents	Mapping with CLO
I 10 Hours	Theory of the Firm and Investment Decisions: Theory of the Firm: Undifferentiated Products, Cournot, Stackelberg, Dominant firm model, Bertrand-Heterogeneous products, Chamberlin's small and large number case, Kinked demand curve theory, Bain's limit pricing, Sales and growth maximization hypothesis, Managerial theories of the firm, Game theoretical models. Investment Decisions: Conventional and modern methods, Risk and uncertainty, Sensitivity analysis, Financial statements and ratio analysis, Inflation accounting, Project appraisal methods, Industrial finance, Sources of finance, Capital structure, Incentive, signaling and control arguments, Separation of ownership and control. Peer reviews of role of various firms.	CLO1
	Learning Activities: Brain-storming and Problem Solving	
II 15 Hours	Market, Competition and Discrimination: Vertically Related Markets and Competition Policy: Successive and mutually related market power, Monopoly, variable proportions and price discrimination, Monopsony and backward integration, Uncertainty, Diversification, rationing and cost economics and asset specificity, Internal hierarchies, Hierarchies as information systems, Incentive structures and internal labour markets, Supervision in hierarchies, Competition policy: Need and requirements, Mergers and acquisitions, Coordination with other policies. Product market Differentiation and Imperfect Information: Lancasterian and Hotelling approaches, Representative consumer approach and Chamberlin's model of diversity of tastes, The address approach, Competition in address, Free entry, Pure profit and non-uniqueness in free entry equilibrium, product diversity and multi address firms, Bargains and rip-offs, Theory of sales, Quality and reputations, Product variety, Imperfect discrimination and price dispersions, Advertising, Dorfman Steiner condition, Lemons and information asymmetries. Modelling and scaffolding.	CLO2
	Learning Activities: Brain-storming and Problem Solving	
III 10 Hours	Technical Change and Market Structure: Technical Change and Market Structure: The Economics of patents, Adoption and diffusion of innovations. Innovations and rivalry: Kamien and Schwartz - Measures of concentration, Concentration ratio, Hirschman - Herfindahl index, Entropy measure, Structure conduct performance paradigm, Contestable	CLO3

	markets, Fixed costs, Sunk costs and contestability, Stackelberg - Spence - Dixit model, Peer reviews of various market structures.	
	Learning Activities: Brain-storming and Problem Solving	
IV 10 Hours	Indian Industry: Industrial growth in India: Trends and prospects, Public enterprises - efficiency, productivity and performance constraints, Small scale industries - definition, role, policy issues and performance, Capacity utilization, Industrial sickness and Exit policy, Concept of competitiveness, Nominal protection coefficients (NPC) and effective rate of protection (ERP), Total factor productivity, Technology transfer, Pricing policies, Administered pricing and LRMC based tariffs, Industrial location policy in India, regional imbalance, Globalization and competition, Privatization. Peer reviews of various problem faced by Indian industries.	CLO4
	Learning Activities: Brain-storming and Problem Solving	

Transaction Mode: Course content will be delivered using presentation, lectures, case study, debates, brain-storming, simulation, role playing and direct observation, blended learning.

Suggested Readings:

1. Ahluwalia, I. J. (1985), *Industrial Growth in India - Stagnation since Mid-sixties*, Oxford University Press, New Delhi.
2. Ahluwalia, I. J. (1991). *Productivity and Growth in Indian Manufacturing*, Oxford University Press, New Delhi.
3. Desai, A. V. (1994). "Factors Underlying the Slow Growth of Indian Industry", in *Indian Growth and Stagnation - The Debate in India* Ex. Deepak Nayyar, Oxford University Press.
4. Ferguson, Paul R. and Glenys J. Ferguson. (1994). *Industrial Economics - Issues and Perspectives*, Macmillan, London.
5. Shepherd, William G. (1985). *The Economics of industrial Organisation*, Prentice - Hall, Inc, Englewood Cliffs, N. J.
6. Staley, E & Morse R. (1965). *Modern Small Industry for Developing Countries*, McGraw Hill Book Company.
7. Vepa R. K. (1988). *Modern Small Industry in India*, Sage Publications.
8. Srivastava, M.P. (1987). *Problems of Accountability of Public Enterprises in India*, Uppal Publishing House, New Delhi.
9. Mohanty, Binode (1991). Ed. *Economic Development Perspectives*, Vol. 3, public Enterprises and Performance, Common Wealth Publishers, New Delhi.
10. Jyotsna and Narayan B. (1990). "Performance Appraisal of PEs in India: A Conceptual Approach", in *Public Enterprises in India - Principles and Performance*, Ed. Srivastava V.K.L., Chug Publications, Allahabad.
11. Mathur, B. L. (1996). "Organisation Patterns for PEs", in *Organisational Development and Management in PEs*, Ed Mathur B. L., Arihant Publishing House, Jaipur.
12. Murty, Varanasy S. (1978). *Management Finance*, Vakils, Feffer and Simons Ltd.
13. Tirole, J. (1996), *The Theory of Industrial Organization*, Prentice - Hall.
14. Holmstrom, B. R., & Tirole, J. (1989). *The theory of the firm*. Handbook of industrial organization, 1, 61-133.
15. Shapiro, C., *Theories of Oligopoly Behaviour*, in Handbook of Industrial Organization, Vol. 1, North-Holland.

Course Name: Gender Economics

Course Code: MECO.508

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, students will be able to:

- CLO1: Describe concepts and approaches to gender,
- CLO2: Discuss economic activities and contribution in economic development by women,
- CLO3: Analyse gender gap in social sector and policy measures to bridge them,
- CLO4: Critique prevailing environment for women.

Units/Hours	Contents	Mapping
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		with CLO
I 11 Hours	Concepts and Theoretical Approaches in Gender Economics: Difference between Gender and Sex, Concept of gender economics, Gender issues in economic theory, Gender division of work, Invisibility of women's work, Gender budget Gender Audit, Approaches: Women in development (WID), Women and development (WAD), Gender and development (GAD), Neoliberal approaches.	CLO1
	Learning Activities: Peer reviews of various role of Gender Economics, brain storming and problem solving	
II 11 Hours	Gender and Development: Conceptualizing and measuring women's contribution to national income and growth, Gender Inequality in human development, Gender related development indices, Measuring gender empowerment, Women in agriculture, Women in industry, Women in services, Gender dimensions of international trade.	CLO2
	Learning Activities: Peer reviews of various role of gender with development brain storming and problem solving.	
III 12 Hours	Gender and Social Sector: Application of theories of capability and human capital for studying gender and education, Significance of Women's education, Gender gaps in educational achievements, Policies and Programmes for promoting women's education. Life cycle approach to gender specific health needs, Reproductive Rights, Gender dimension of national health policies and programmes, National Rural Health Mission, Reproductive and Child Health Programme.	CLO3
	Learning Activities: Peer reviews of various role of gender with social sector, brain storming and problem solving.	
IV 11 Hours	Transition to Socialism: Women, Poverty and Environment: Women's Rights, Deprivation and marginalization of women, Feminization of poverty: extent, causes and consequences, Welfare-oriented Programmes to empowerment-oriented programmes, Need for gender concerns in designing social security policy, Women and environment.	CLO4
	Learning Activities: Peer reviews of various role of women in real world, brain storming and problem solving.	

Transaction Mode: Course content will be delivered using presentation, lectures, case study, debates, brain-storming, simulation, role playing and direct observation, blended learning.

Suggested Readings:

1. Anupama. (2007). 'Gender discrimination in quality of employment and wages in unorganised manufacturing sector of India', Indian Journal of Labour Economics, 50(4), 1007-1119.
2. Arputhamurthy, S. (1990). *Women Work and Discrimination*, New Delhi: Ashish Publishing House.
3. Bosarup Ester. (1970). *Women's Role in Economic Development*, George Allen and Unwin, London.
4. Devasia Leelamma. (1994). *Empowering Women for Sustainable Development*, Ashish Publishing House, New Delhi.
5. Eswaran, M. (2014). *Why Gender Matters in Economics*, Princeton University Press.
6. Jacobsen, J. (2007). *The Economics of Gender*, Wiley-Blackwell.
7. Jose, S. (2008). 'Paid employment and female autonomy in India: issues and evidence', Indian Journal of Labour Economics, 51(3), 397-408.
8. Mazumdar, I. and N. Neetha. (2011). 'Gender dimensions: employment trends in India 1993-94 to 2009-10', Economic and Political Weekly, 46(43), 118-126.
9. Neetha, N. (2006). 'Invisibility continues? Social security and unpaid women workers' Economic and Political Weekly, 41(32), 3497-3498.
10. Nirmala, V and, K. S. Bhat. (1999). 'Female work participation in the emerging labour market in India', Indian Journal of Labour Economics. 42(4), 613-639.

11. Pal, M., P. Bharati, B. Ghosh, and T.S. Vasulu (eds.) (2011). *Gender and Discrimination Health, Nutritional Status, and Role of Women in India*, New Delhi: Oxford University Press.
12. Pellissery, S. and S. K. Jalan. (2011). 'Towards transformative social protection: a gendered analysis of the Employment Guarantee Act of India (MGNREGA)', *Gender and Development*, 19(2), 283-294.
13. Sen, A. and J. Drèze. (1995). *India: Economic Development and Social Opportunity*, Oxford University Press.

Course Name: Economics of Healthcare: Theory & Policy

Course Code: MECO.509

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Create awareness on the health policy and health care,
- CLO2: Develop an understanding of economic principles as applied to health and health care,
- CLO3: Elucidate the market and market failures in the health and health care
- CLO4: Enlighten on the Health care reforms and policies

Units/Hours	Contents	Mapping with CLO
I 12 Hours	Introduction to Health Economics: What is the Health Economics, the relevance of health economics: health care's share in GDP, does economics apply to health and health care? Is health care difference, The role of economists in the health sector. Health and health care, Health care as an economic commodity, the nature of health care: need versus demand. Economic Evaluation of Health Care	CLO1
	Learning Activities: Brain-storming and problem solving	
II 11 Hours	Microeconomic Tools for Health Economics: Scarcity and production possibility frontier, Demand for health and health services, shifts in demand for health care, Production function health and health care, Cost functions and economies of scale and scope, Cost studies including hospital cost analysis, Efficiency measurement of hospitals (including DEA, etc), The Demand for Health Capital: Labour–Leisure Trade-Offs, The Grossman Model. Health Insurance: The demand and Supply of Health insurance, Moral hazard, and adverse selection. Asymmetric information, an agency relationship	CLO2
	Learning Activities: Brain-storming and problem solving.	
III 11 Hours	Market and Market Failures in Health and Healthcare: Market structures, Market failures, and Government, the hospital as an economic agent, Supplier induced demand. Pharmaceutical Industry: Drug pricing and Profits, Research and Development (R&D) and Innovation, New drug, and Health care spending.	CLO3
	Learning Activities: Brain-storming and problem solving.	
IV 11 Hours	Health and Development & Health Policy and Reforms Measures of health and development, Disease profiles of rich and poor countries, Health and growth, Health expenditure and health, Linkage between poverty and health. Health Policy and Reforms: Epidemics and Epidemic acts in India. National Health Policy 1983, 2002 and 2017. Ayushman Bharat – Pradhan Mantri Jan Arogya Yojana (AB PM-JAY), India's Role in the combat of Covid-19 through Vaccine. Health Sector Strategic Plan, Need for and concept of health sector reform (HSR).	CLO4
	Learning Activities: Peer discussion and case analysis, brain storming and problem solving.	

Transaction Mode: Presentation, lectures, case study, debates, brain-storming, simulation, role playing, field visits and direct observation, blended learning.

Suggested Readings:

1. Charles E. Phelps (1997). *Health Economics*. New York. Harper Collins.
2. Clewar, A and Perken, D. (1998). *Economics of Health Care Management*. London: Prentice-Hall.
3. Culyer AJ and Newhouse JP (2000) Handbook of Health Economics, North Holland, Volumes 1A & 1B.
4. Donaldson, C. and Gerard, K. (1993). *Economics of Health Care Financing*. Macmillan. Economics Issues in Health Care Series. ISBN: 0-333-53870-6. #1
5. Donaldson, C. and K Gerard, (1993), *The Economics of Health Care Financing*, Macmillan.
6. Drummond, M.F. G. L. Stoddard and G. W. Torrance (1987) Methods for the economic evaluation of health care programs. Oxford Medical Publications. Oxford: OUP.
7. Feldstein, Paul J (1983), *Health Care Economics*, John Wiley and Sons, New York (Second Edition or the latest edition).
8. Folland, S., Goodman, A. and Stano, M. (2000). *The Economics of Health and Health Care*. Third Edition. Prentice-Hall. ISBN: 0-13-0122157.
9. Lilienfeld, A. M. and D. E. Lilienfeld, (1980), *Foundations of Epidemiology*. Oxford University Press. (Second Edition or latest).
10. McGuire, A., Henderson, J., and Mooney, G. (1992). *The Economics of Health Care*. Routledge. ISBN: 0-415-06586-0.
11. McGuire, A., J. Henderson and G. Mooney (1988), *The Economics of Health Care*. RKP.
12. Paul J. Feldstein (1993). *Health Care Economics*, 4th Edition, Delmar Publishers Inc.
13. Peter Zweifel and Friedrich Breyer (1997). *Health Economics*, Oxford University Press. This is an advanced text.
14. Philip Jacobs (1991). *The Economics of Health and Medical Care*. Third Edition, An Aspen Publication.
15. Rice, T. (1998). *The Economics of Health Reconsidered*. Chicago: Health Administration Press

Course Name: Financial Institutions and Markets

Course Code: MECO.510

L	T	P	Credit
3	0	0	3

Course Learning Outcomes (CLO): On completion of this course, learners will be able to:

CLO1: Evaluate the functioning of a financial system,

CLO2: Assess the role of financial markets in an economy,

CLO3: Describe the efficiency of financial institutions, and

CLO4: Explain the effectiveness of financial services in an economy.

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Financial System – Formal and Informal Financial Sectors, Components of the formal financial system, functions of a financial system, key elements of a well-functioning financial system, nature and role of financial intermediaries and financial markets in an economy, Structure of the Indian Financial System and reforms, Relationship between the financial system and economic growth – some theoretical and empirical evidence.	CLO1
	Learning Activities: Brain-storming and Problem Solving	
II 11 Hours	Financial Markets – The Money Market – Functions of the Money Market, Benefits of an Efficient Money Market, Money Market Instruments, The Indian Money Market; The Capital market – Functions of a Capital market, The Primary Market and Secondary Market, The Derivative Market, The Debt Market; Financial Regulation – RBI and SEBI.	CLO2
	Learning Activities: Brain-storming and Problem Solving	

III 11 Hours	Financial Institutions – Development Financial Institutions in India, Banking and Non-Banking Institutions, Management of NPAs by Banks in India, Mutual Funds – Investors, Organization, Types of Funds; Insurance – Role of Insurance in economic growth, Insurance intermediaries, Insurance Types, Insurance Regulatory – IRDA	CLO3
	Learning Activities: Brain-storming and Problem Solving	
IV 12 Hours	Financial Services – Investment Banking Services, Merchant Banking Services, The Depository System, Introduction to Credit Rating - CRISIL and ICRA, Housing Finance, Leasing and Hire Purchase, Financial Inclusion and Microfinance, International Financial Institutions such as IMF and the World Bank and their relationships with Indian Financial Institutions. FDI and FII: nature and scope.	CLO4
	Learning Activities: Brain-storming and Problem Solving	

Transaction Mode: Course content will be delivered using presentation, lectures, case study, debates, brain-storming, simulation, role playing and direct observation, blended learning.

Suggested Readings:

1. Avadhani, V.A. (2012). *Financial Services and Markets*, Himalaya Publishing House, India
2. Bhole, L. M. (2015). *Indian Financial System*, Chugh Publications, Allahabad, India
3. Bhole, L. M. (2016). *Financial Institutions and Markets*, Tata McGraw Hill Company Ltd., New Delhi, India
4. Gordon and Natarajan. (2012). *Financial markets and services*, Himalaya Publishing House, India
5. Gupta, Shashi K. & Agrawal, Nisha. (2013). *Financial services*, Kalyani Publishers, India
6. Houthakker, H. S. & Williamson, P. J. (1996). *Economics of Financial Markets*, Oxford University Press.
7. Khan, M. Y. (2016). *Indian Financial System*, Tata McGraw Hill, New York.
8. Pathak, B. (2014). *Indian Financial System*, Pearson Publication, India

Course Name: Political Economy of Development

Course Code: MECO.511

L	T	P	Credit
3	0	0	3

Course Learning Outcomes (CLO): On completion of this course, learners will be able to:

- CLO1: Develop understanding of philosophical approaches to political economy,
CLO2: Develop the ability of analysing Marxian political economy,
CLO3: Develop ability of conceptualization of imperialism and neo-colonialism,
CLO4: Develop ability to analyse transition to socialism.

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Introduction to Political Economy: Idealism and materialism; Metaphysics and dialectics; Laws of dialectics; Categories of philosophy; Theory of cognition; Dialectical and Historical Materialism; Mode of production; Social super-structure and its elements; Dialectical interaction of base and superstructure; Historical social-economic formations; and Asiatic mode of production.	CLO1
	Learning Activities: Peer review of political economy, brain-storming and problem solving	
II 11 Hours	Marxian Political Economy: Analysis of capitalism; Development of capitalism in agriculture; Nature and process of planning; Market mechanism; Methods of accumulation; and Primitive socialist and capitalist methods.	CLO2
	Learning Activities: Modelling and scaffolding, brain storming and problem solving.	
III	Conceptualization of Imperialism: Emergence of monopoly	CLO3

12 Hours	capitalism and imperialism; Role of banks in monopoly capitalism; Imperialism; Imperialism and the state; Concept of neo-colonialism; Colonialism and Neo-Colonialism; Forces against neo-colonialism and imperialism.	
	Learning Activities: Modelling and scaffolding, brain storming and problem solving.	
IV 11 Hours	Transition to Socialism: Transition period; Problems and policies; Nature of state; Role of Planning; Market mechanism; Distribution of income and wages; and Strategies for third world development, Decline in Socialism. Washington Consensus.	CLO4
	Learning Activities: Peer review of socialism, brain storming and problem solving.	

Transaction Mode: Presentation, lectures, case study, debates, brain-storming, simulation, role playing and direct observation, blended learning.

Suggested Readings:

1. Dobb, M. (2012). *Russian Economic Development since the Revolution*. London: Routledge Publications.
2. Mandel, E. (1999). *Late Capitalism*. London: Verso Publication.
3. Maurice, C. (2015). *Diametrical Materialism: An Introduction*. Aakar Books Publishers.
4. Petras, J. F. and Veltmeyer, H. (2001). *Globalization Unmasked: Imperialism in the 21st Century*. Canada: Fernwood Publication.
5. Preobrazhensky, E. A. (1965). *The New Economics*. London: Oxford University Press. (Open Online Access)
6. Ravenhill, J. (2016). *Global Political Economy*. Oxford: Oxford University Press.
7. Schumpeter, J. A. (2013). *Theory of Economic Development of Capitalism, Socialism and Democracy (2nd Ed.)*. Wilder Publication, Inc.
8. Sweezy, P. M. (1991). *The Theory of Capitalist Development (1st Ed.)*. New Delhi: K. P. Bagchi and Co.
9. Varoufakis, Y., Theocarakis, N., and Halevi, J. (2012). *Modern Political Economics: Making Sense of the Post-2008 World (2nd Ed.)*. Oxford: Taylor & Francis Publications.
10. Wilczynski, J. (1982). *The Economics of Socialism (1st Ed.)*. New Delhi: S. Chand & Co. Ltd.

Course Name: Managerial Economics

Course Code: MECO.512

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Illustrate the central decision problems managers face,
- CLO2: Provide the economic analysis to managerial decisions,
- CLO3: Use economic methods in managerial decision making, and
- CLO4: Apply relevant principles and techniques to real-life situations involving managerial decision making

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Introduction to Managerial Economics: Nature, Scope and Methods of Managerial Economics; Theory of the Firm; Introduction to Economic Decision Making – Examples of Managerial Decisions, Steps to Decision Making, Private and Public Decisions.	CLO1
II 12 Hours	Decisions within Firms – Optimal Decisions Using Marginal Analysis, Demand Analysis and Optimal Pricing, Demand Estimation and Forecasting, Production Decisions, Marginal Analysis of Production, Cost Analysis and Optimal Decisions, Cost Estimation.	CLO2
III 11 Hours	Competing within Markets and Pricing – Perfect Competition and Market Efficiency, Monopoly and Monopolistic Competition, Oligopoly: Price, Quantity and Other Competitions, Game Theory and Competitive Strategy.	CLO3

IV 11 Hours	Decision Making Applications – Decision Making Under Risk and Uncertainty; Problem Solving Approach of Managerial Economics – Pricing Strategy, Investment Analysis, Government and Managerial Policy.	CLO4

Transactions Mode: Lecture, Problem Solving, Case Analysis, Brainstorming, Group Discussion, Peer Learning

Suggested Readings:

1. Allen, W. B., Weigelt, K., Doherty, N., & Mansfield, E. (2012). *Managerial Economics: Theory, Applications and Cases*, W. W. Norton & Co. Inc., 8th Edition
2. Froeb, L. M., McCann, B. T., Shor, M. & Ward, M. R. (2018). *Managerial Economics: A Problem Solving Approach*, Cengage Learning, 5th Edition
3. Graham, R. (2013). *Managerial Economics for Dummies*, John Wiley & Sons Inc. 3rd Edition
4. Wilkinson, N. (2005). *Managerial Economics: A Problem-Solving Approach*, Cambridge University Press, 1st Edition
5. William F. Samuelson & Marks, Stephen G. (2012). *Managerial Economics*, John Wiley & Sons Inc., 7th Edition

Course Name: Economics of Microfinance

Course Code: MECO.513

L	T	P	Credit
3	0	0	3

Course Learning Outcomes (CLO):

On completion of this course, learners will be able to:

- CLO1: Accrue knowledge on the evolution of the concept of microfinance
- CLO2: Understand the rationale and the process of development of microfinance products
- CLO3: Familiar with the role of microfinance as an instrument of women empowerment
- CLO4: Evaluate the role of Self-Help Groups in rural development

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Microfinance Revolution: Rethinking Banking - Why Doesn't Capital Naturally Flow to the Poor -The Grameen Bank and the Beginnings of Microfinance -A Microfinance Revolution - From "Microcredit" to "Microfinance"- Why Intervene in Credit Markets - Rationales for Intervention - Rotating savings and credit associations (ROSCAs) - Limits to ROSCAs - Impact of Micro Finance on Poverty eradication.	CLO1
	Learning Activities: Lectures, Assignments, Term Papers. Quiz	
II 12 Hours	Development of Microfinance Products: Concept of Micro Finance – Financial Collateral - The Grameen Bank - Targeting Women - Neoclassical Approaches to Household Decision Making - How Microfinance Affects Households - Contributions of Md. Yunus - Growth of Micro Finance in India – Micro Finance for poverty reduction in India – Micro Finance and the Millennium Development Goals – Pros and cons of Micro Credit Programme – Micro Finance Models in India – Microfinance crisis in India in late 2000s.	CLO2
	Learning Activities: Lectures, Assignments, Term Papers, Quiz	
III 11 Hours	Microfinance and Women Empowerment: Concept of empowerment of women– Components of women empowerment – Constraints faced by women for empowerment – Role of Micro Finance in economic development of women – Empowerment of women and Micro-business.	CLO3
	Learning Activities: Lectures, Assignments, Term Papers, Case studies	
IV 11 Hours	Self-Help Groups and Rural Development: The Concept, Why Self Help Groups? – Objectives – Functions of SHGs Promotion– Formation of SHG - Constraints of Women SHGs - What are the Important Steps for Sustainable Development of SHGs? What are the Skills needed for Managing Successful SHGs? - The Group-Lending - Group Lending beyond Villages- Linking of Self Help Group to Bank, Stepwise process	CLO4

	of Operating of SHG – SHG Federation.	
	Learning Activities: Lectures, Assignments, Term Papers, Quiz	

Transaction Mode: Class Lecture, Blended Learning, Discussion, and Case Studies.

Suggested Readings:

1. Beatriz, Armendariz & Jonathan Morduch (2002). Economics of Microfinance, PHI Learning Publications, New Delhi.
2. Cernea, Michael M. (1988). NGOs and Local Development, The World Bank, Washington, Discussion Paper.
3. Desai, Vasant. (2020). Rural Development in India , Himalaya Publishing House.
4. Farrington, John, & Leiws, D. J. (1993). NGOs and the State in Asia, Routledge, London.
5. Rais, Ahmad (2009). Micro Finance and Women Empowerment, Mittal Publication, New Delhi.
6. Vijayakumar, A. (2009). Banking, Micro Finance and Self Help Group in India, New Century Publications, New Delhi.

Course Name: Globalization and Development

Course Code: MECO.514

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, students will be able to:

- CLO1: Asses the process of globalization,
- CLO2: Correlate the process of globalization with the functioning of transnational corporations,
- CLO3: Evaluate the regional and multilateral agreements under globalization, and
- CLO4: Critically assess the process of economic development in the perspective of globalization.

Units/Hours	Contents	Mapping with CLO
I 12 Hours	Issues in Globalization: Alternative Perspectives on its Nature and Character; Critical Dimensions: Economic, Political, Strategic, Cultural and Informatics, Globalization and the new global economy: Globalization as representing the triumph of free market capitalism; Continuity and change in the world economy since the 1970s; Economic Policy Changes in the Advanced and Developing Nations and Developments in Communication Technology. Covid-19 and Future of Globalisation.	CLO1
	Learning Activities: Peer discussion and case analysis, brain-storming and problem solving	
II 11 Hours	Transnational Corporations and the Globalization Process: TNCs and FDI and technology flow; Changing patterns of international trade: intra-firm and inter-firm trade; international production networks; Structure and Working of the International Capital market: the main actors and instruments of international asset transaction; offshore banking; Eurocurrencies and their trading; global finance and hot money flows. Pandemic Covid-19 and its impact on Global Economy.	CLO2
	Learning Activities: Brain storming and case analysis, brain-storming and problem solving	
III 11 Hours	Regional and multilateral agreements: Brief History of Multilateral Institutions, their Structure and Working: International Monetary Fund and the World Bank; The World Trade Organization: Organizational structure and decision-making process and its evolving role; Questioning the benefits of economic integration: Inequality and instability in global economy.	CLO3
	Learning Activities: Peer discussion and case analysis, brain storming and problem solving	
IV 11 Hours	Agricultural Globalization and Developing Countries: Industry and Services in the globalization process: Labour, Migration and	CLO4

	Outsourcing; Globalization, State, Sovereignty and the Civil Society; The World Social Forum.	
	Learning Activities: Peer review of various problems, brain storming and problem solving.	

Transaction Mode: Lecture, problem solving, group discussion.

Suggested Readings:

1. Bhatia, S.K. (2017). *Brexit and India: Analyzing the Implication* (Eds.). New Delhi Publishers.
2. Daniels, P.W., and Lever, W.F. (1997). *The Global Economy in Transition*. Harlow:
3. Edwards, M., and Gaventa, J. (2001). *Global Citizen Action: Perspectives and Challenges*. Boulder Colo: Westview Press.
4. Held, D., McGrew, A., Goldblatt, D., and Perraton, J. (1999). *Global Transformation: Politics, Economics and Culture*. Cambridge: Polity Press.
5. Herman, Edward and Robert W McChesney, *Globalization of culture* (New Delhi: Madhyam Books 2003)
6. Hoogvelt, A. M. M. (1997). *Globalisation and the Postcolonial World: The New Political Economy of Development*. Palgrave Macmillan.
7. Jackson, H. J. (1998). *The World Trade Organisation*. London: The Royal Institute of International Affairs.
8. James, P., and Veltmeyer, H. (2001). *Globalisation Unmasked*. London: Zed Books.
9. Khor, K. P., and Khor, M. (2001). *Rethinking Globalisation: Critical Issues and Policy Choices*. London: Zed Books.
10. Kofman, E., and Youngs, G. (2001). *Globalisation: Theory and Practice* (2Ed.). London: Pinter.
11. Munck, R. (2003). *Globalization and Labour: The New Great Transformation*. Zed Books Ltd.
12. Nayyar, D. (2002). *Governing Globalisation: Issues and Institutions*. Delhi: Oxford University Press.
13. Robert. C. Feenstra, and Alan, M.Taylor. (2011). *International Economics*, second edition WorthPublishers.
14. Robert. C. Feenstra. (2004). *Advanced International Trade, Theory and Evidence*, Published by Princeton University Press.
15. Sailors, J. W., Qureshi, U. A., and Cross, E. M. (1973). *Empirical Verification of Linder's Trade Thesis*. Southern Economic Journal, 262268.
16. Sakamoto, Y. (1994). *Global Transformation: Challenges to the State System*. Tokyo: United Nations University Press.
17. Salvatore, D. (2013). *International Economics* (11th Edition). USA: Wiley.
18. Sandeep, K. (2015). *Migration and Bilateral Trade Flows: Evidence from India and OECD Countries*. *Applied Econometrics and International Development*, 15(2), 179-196.
19. Scholtze, J.A. (2000). *Globalisation: A Critical Introduction*. Basingstoke: Palgrave.
20. Stiglitz, J. (2002). *Globalization and its Discontents*. London: Penguin.
21. UNCTAD, Trade and Development, Various Issues.
22. White, B., Little, R., and Smith, M. (2001). *Issues in World Politics* (2Ed.). Basingstoke: Palgrave.
23. Williams, M., Goetz, A. M., O'Brein, R., and Scholte, J. A. (2000). *Contesting Global Governance: Multilateral Economic Institutions and Global Social Movements*. Cambridge: Cambridge University Press.

Course Name: Cost-Benefit Analysis in Economics

Course Code: MECO. 515

Learning Outcome: On completion of this course, learners will be able to:

L	T	P	Credit
3	0	0	3

- CLO1: Familiar with the Concepts and Methods of Cost Benefit Analysis
- CLO2: Understand the Microeconomic Foundations of Cost-Benefit Analysis
- CLO3: Critically evaluate the Economic Analysis of Projects
- CLO4: Learn the practical steps involved in conducting Cost Benefit Analysis

Units/Hours	Contents	Mapping with CLO
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I 11 Hours	Introduction to Cost Benefit Analysis (CBA): Introduction to Cost-Benefit Analysis; Individual Versus Social Costs and Benefits; Types of CBA Analyses; The Basic Steps of CBA; The Origins and Demand for CBA; The Cost of Doing CBA; Conceptual Foundations of Cost-Benefit Analysis: CBA as a Framework for Assessing Efficiency, Using CBA for Decision-Making, Fundamental Issues Related to Willingness to Pay, Concerns about the Role of CBA in the Political Process, Limitations of CBA: Other Analytical Approaches.	CLO1
	Learning Activities: Brain-storming and Problem-Solving	
II 12 Hours	Microeconomic Foundations of Cost-Benefit Analysis: Demand Curves; Supply Curves; Social Surplus and Allocative Efficiency; Distributional Implications; Incorporating the Social Cost of Raising Revenue through Taxation; Consumer Surplus and Willingness to Pay; Compensating Variation, Income and Substitution Effect.	CLO2
	Learning Activities: Brain-storming and Problem-Solving	
III 11 Hours	Economic Analysis of Projects: Introduction; Original Methodology and Changing Policy Environment; Methodological Developments: Income distribution and poverty, Risk and uncertainty, Valuation of non-marketed goods, Environmental sustainability, Discounting; Alternatives to Cost-Benefit Analysis; Practical Applications.	CLO3
	Learning Activities: Brain-storming and Problem Solving	
IV 11 Hours	Shadow Prices and Cost Effectiveness Analysis: Value of a Statistical Life, Value of a Life-Year, Cost of Injuries and Crashes, Cost of Crime, Value of Time, Value of Recreation, Value of Nature, Value of Water and Water Quality, Cost of Noise, Cost of Air Pollution, Social Costs of Automobiles, and Benefit Transfer. Cost Effectiveness Analysis and Cost-Utility Analysis	CLO4
	Learning Activities: Brain-storming and Problem Solving	

Transaction Mode: Lecture; Presentation, Demonstration, Case analysis, Peer learning.

Suggested Readings

1. ADB. (2013). Cost-benefit analysis for development: A practical guide. ADB. ISBN 978-92-9092-957-4 (Print), 978-92-9092-958-1 (PDF).
2. Boardman, A. E., Greenberg, D. H., Vining, A. R., & Weimer, D. L. (2018). Cost-benefit analysis: concepts and practice. Cambridge University Press. 5th Edition, ISBN 978-1-108-41599-6 Hardback ISBN 978-1-108-40129-6 Paperback.
3. Weimer, D. (Ed.). (2009). *Cost-benefit analysis and public policy*. the Association for Public Policy Analysis and Management. John Wiley & Sons, ISBN: 978-1-405-19016-9
4. Alan E. Dillingham, Ted Miller, and David T. Levy, "A More General and Unified Measure for Valuing Labour Market Risk." *Applied Economics*, 28, 1996, 537–42. 18.
5. Charles Blackorby and David Donaldson, "A Review Article: The Case Against the Use of the Sum of Compensating Variation in Cost-Benefit Analysis." *Canadian Journal of Economics*, 23(3), 1990, 471–94. 7.
6. Charles Blackorby and David Donaldson, "Consumers' Surpluses and Consistent Cost-Benefit Tests." *Social Choice and Welfare*, 1(4), 1985, 251–62.
7. Ian W. H. Parry, Margaret Walls, and Winston Harrington, "Automobile Externalities and Policies." *Journal of Economic Literature*, 45(2), 2007, 373–99. 68.
8. Nicholas Stern, *The Economics of Climate Change: The Stern Review* (New York, NY: Cambridge University Press, 2007).
9. Steven Kelman, "Cost-Benefit Analysis: An Ethical Critique." *Regulation*, January/February 1981, 33–40.
10. Ted R. Miller, "Variations Between Countries in Values of Statistical Life." *Journal of Transport Economics and Policy*, 34(2), 2000, 169–88; Janusz R. Mrozek and Laura O. Taylor, "What Determines the Value of Life? A Meta-Analysis."

11. Zaloshnja, Miller, Romano, and Spicer, “Crash Costs by Body Part Injured, Fracture Involvement, and Threat to Life Severity, United States, 2000.”

Course Name: Foundations of Economics

Course Code: MECO.516

L	T	P	Credit
2	0	0	2

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Recognize the basic structure of an economy,
- CLO2: Assess the functioning of markets in an economy,
- CLO3: Evaluate the effectiveness of economic policies, and
- CLO4: Apply theories and approaches of economics for economic development of country.

Units/Hours	Contents	Mapping with CLO
I 08 Hours	Economics: The production possibility frontier, Demand, Elasticity of demand, Supply, Market equilibrium, The free market system, Intervening in the market system, Costs: Short run and long run, Revenues, costs, and profits. Peer review of basic concepts. Learning Activities: Brain-storming and Problem Solving	CLO1
II 07 Hours	Market structure: Perfect competition, Monopoly, Oligopoly, Monopolistic competition and non-price competition, Monopsony and Oligopsony. The labour market, Introduction to macroeconomics, Macroeconomic Equilibrium in the economy Learning Activities: Brain-storming and Problem Solving	CLO2
III 08 Hours	National income and the standard of living: Aggregate demand, aggregate supply, and the price level, Consumption, Investment, Fiscal policy, Money and monetary policy. Learning Activities: Brain-storming and Problem Solving	CLO3
IV 07 Hours	Economic growth and the economic cycle: Unemployment, Inflation, Exchange rates, international trade, balance of payments, and protectionism, Protectionism and globalization. Learning Activities: Brain-storming and Problem Solving	CLO4

Transaction Mode: Course content will be delivered using presentation, lectures, case study, debates, brain-storming, simulation, role playing and direct observation, blended learning.

Suggested Readings:

1. Dewett, K. K. (2010). *Modern Economic Theory*. New Delhi: S. Chand & Company Ltd.
2. Gillespie, Andrew. (2014). *Foundations of Economics* (3rd Edition). Oxford University Press, Oxford.
3. Hoag, A.J and Hoag, J. H. (2010). *Introductory Economics* (4th Edition). Chennai: World Scientific Publishing Co. Pte. Ltd.
4. Lipsey, R.G., and Chrystal, K.A. (1995). *An Introduction to Positive Economics*, Oxford University Press.
5. Mankiw, N. (2014). *Principles of Economics* (3rd Edition). South Western: Mason.
6. Samuelson, P.A., and William Nordhaus. (2009). *Economics*, Tata Mc Graw-Hill.

Course Name: Introduction to Indian Economy

Course Code: MECO.517

L	T	P	Credit
2	0	0	2

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Analyse the economic scenario of India,
- CLO2: Recognize the sectoral composition of Indian economy,
- CLO3: Assess the effectiveness of economic policies, and
- CLO4: Evaluate the foreign trade policies and achievements of India.

Units/Hours	Contents	Mapping with CLO
I	Basic features and problems of Indian Economy: Economic History	CLO1

08 Hours	of India; Nature of Indian Economy, demographic features and Human Development Index, Problems of Poverty & Inequality, Unemployment, Inflation, Black money in India. Economics history of India during colonial period. Peer review of problem in Indian economy.	
	Learning Activities: Brain-storming and Problem Solving	
II 07 Hours	Sectoral composition of Indian Economy: Issues in Agriculture sector in India, Agriculture policies of India, Industrial development, small scale and cottage industries, industrial Policy, Public sector in India, service sector in India. Peer review of agriculture sector.	CLO2
	Learning Activities: Brain-storming and Problem Solving	
III 08 Hours	Economic Policies: Economic Planning in India, NITI Aayog, monetary policy in India, Fiscal Policy in India, Centre-state Financial Relations. Modelling and Scaffolding.	CLO3
	Learning Activities: Brain-storming and Problem Solving	
IV 07 Hours	External sector in India: India's foreign trade value composition and direction, India Balance of payment since 1991, FDI in India, Impact of Globalization on Indian Economy, WTO and India. Modelling and Scaffolding. Impact of Covid-19 on Indian Economy.	CLO4
	Learning Activities: Brain-storming and Problem Solving	

Transaction Mode: Course content will be delivered using presentation, lectures, case study, debates, brain-storming, simulation, role playing and direct observation, blended learning.

Suggested Readings:

1. Dutt Rudder and K.P.M Sunderam. (2017). *Indian Economy*. S Chand & Co. Ltd. New Delhi.
2. Mishra S.K & V.K Puri. (2017). *Indian Economy and –Its Development Experience*. Himalaya Publishing House.
3. Singh, Ramesh. (2016). *Indian Economy*, Tata-McGraw Hill Publications, New Delhi.
4. Dhingra, I.C. (2017). *March of the Indian Economy*, Heed Publications Pvt. Ltd.,
5. Karam Singh Gill. (1978). *Evolution of the Indian Economy*, NCERT, New Delhi
6. Kaushik Basu. (2007). *The Oxford Companion to Economics of India*, Oxford University Press.

Course Name: Agriculture Development and Management.

Course Code: MECO.518

L	T	P	Credit
2	0	0	2

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Identify the factors influencing agricultural development in India,
- CLO2: Assess the land reform policies in India,
- CLO3: Evaluate the efficiency of the public distribution system in India,
- CLO4: learn innovative ways to link farmers with new markets.

Units/Hours	Contents	Mapping with CLO
I 8 Hours	Agriculture Sector: Components; Its relative importance with other sectors; Features of Agriculture Sector in India; Focus on Agricultural Development after independence; Theories of Agricultural Economics, Green Revolution: Factors responsible, positive and negative impacts.	CLO1
	Learning Activities: Modelling and Scaffolding.	
II 7 Hours	Land Reforms, Agricultural Marketing: definition; types, problems; Agricultural Price Policy: Objectives, Minimum Support Price (MSP), India's recent Farm Act and its Impact.	CLO2
	Learning Activities: Peer review of agriculture problems.	
III 8 Hours	Public Distribution System (PDS): Evolution of Schemes, Functioning, Problems; Food Subsidy: Economic Costs and Central Issue Prices. Peer review of acts of market.	CLO3
	Learning Activities: Brain Storming and Problem Solving.	

IV 7 Hours	Managing Agriculture: role of agri-business, linking farmers with new markets, diversifying agriculture. Peer review of new policies.	CLO4
	Learning Activities: Brain-storming and Problem Solving	

Transaction Mode: Lecture, case study, problem solving, group discussion & demonstration, self-study, blended learning.

Suggested Readings:

1. Acharya, S.S. and Agarwal, N.L. (2012). *Agricultural Marketing in India*. New Delhi: Oxford & IBH Publishing Co. Pvt. Ltd.
2. Lekhi, R. K. And Singh, J. (2015). *Agricultural Economics: An Indian Perspective* Ludhiana: Kalyani Publishers.
3. Reddy, S.S., Ram, P.R, Sastry, T.V.N, Devi, I.B. (2015). *Agricultural Economics*. New Delhi, India: Oxford and IBH Publishing Co. Pvt. Ltd.
4. Soni, R. (2004). *Leading Issues in Agricultural Economics*, New Delhi: Vishal Publishing.

Course Name: Indian Economic Thought

Course Code: MECO.519

L	T	P	Credit
2	0	0	2

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Understand the ancient Indian economic thoughts,
- CLO2: comprehend the basic economic activities,
- CLO3: Understand the colonial economic thoughts, and
- CLO4: know the pre-plan period economic thoughts.

Units/Hours	Contents	Mapping with CLO
I 7 Hours	Definition and Scope of economic activities – Kautilya and Shukra; Basic assumptions – integral man, integrated rationality, Dharma, Purusarthas, Varnasharm; Human wants – nature, origin and kinds.	CLO1
	Learning Activities: Presentation, Peer learning, self-learning.	
II 8 Hours	Economic ideas of Manu, Brihaspati, Shukra and Kautilya in field of consumption, production, exchange, distribution and public finance.	CLO2
	Learning Activities: Presentation, Peer learning, self-learning.	
III 7 Hours	Economic Thoughts of Swami Dayanand Saraswati, Dada Bhai Naoroji, Mahadev Govind Ranade, Gopal Krishna Gokale, R. C. Dutta and M. N. Roy.	CLO3
	Learning Activities: Presentation, Peer learning, self-learning.	
IV 8 Hours	Major economic thought of M. K. Gandhi, Vinoba Bhave, Dr. B. R. Ambedkar, Jawaharlal Nehru, Ram Monohar Lohia, Deen Dayal Upadhyaya, J. K. Mehta and Amartya Sen .	CLO4
	Learning Activities: Presentation, Peer learning, self-learning.	

Transaction Mode: lecture, discussion, Presentation, Blended learning, Brain-storming.

Suggested Readings:

1. Gupta, B. L. (1942). *Value and Distribution system in Ancient India*, Gian Publishing House.
2. Ganguli, B. N. (1977). *Indian Economic Thought: A 19th Century Perspective*, TMH, New Delhi
3. Kautilya (1951). *Arthshastra* translated by R. Sharma Shastri, Sahitya Academy of India
4. Kulkarni, S. A. (1987). *Ekatma Arthniti*, Suruchi Prakashan, New Delhi
5. Bokare. M. G. (n.d). *Hindu Economics*, Janki Prakashan, New Delhi
6. Dutta, R. C. (n.d). *Economic History of India*, Vol. I & II.
7. Gandhi, M. K. (1974). *India of My Dreams*, Navjivan Publishing House, Ahmadabad
8. Sen, A. K. (1981). *Poverty and Famines: An Essay on Entitlement and Deprivation*, Oxford University Press.

SEMESTER -II

Course Name: Economics of Growth and Development

Course Code: ECO.421

L	T	P	Credit
4	0	0	4

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Understand concepts of growth and development,
- CLO2: Understand the theories of growth and development
- CLO3: Understand the models of growth and development
- CLO4: Understand investment criterion for development, and techniques of economic production.

Units/Hours	Contents	Mapping with CLO
I 15 Hours	Growth and Development: Meaning and difference; Indicators of Growth – GDP and Per capita GDP; Indicators of economic development – PQLI, HDI, MPI, Problems of Economic Development; Poverty, Inequality and Sustainable Development – SDGs and Managing Sustainable Development.	CLO1
	Learning Activities: Brain-storming and Problem Solving	
II 15 Hours	Theories of Development: Adam Smith, Ricardo, Malthus, Karl Marx, Schumpeter, and Rostow; Models of Economic Growth: Harrod-Domar, Solow, Robinson, Endogenous Growth Models.	CLO2
	Learning Activities: Brain-storming and Problem Solving	
III 15 Hours	Dualism: Meaning, Characteristics and forms; Models of Dualistic growth: Lewis, Ranis and Fei, Jorgenson, and Todaro; Approaches to Development: Balanced Growth, Critical Minimum Effort, Big Push, Unbalanced growth.	CLO3
	Learning Activities: Brain-storming and Problem Solving	
IV 15 Hours	Investment Criteria: Choice of Techniques - labour, capital and intermediate; Vicious Circle of Poverty and Low Level Equilibrium Trap; Theories of Institutions and Development; Infrastructure and Economic Development. Peer discussion on Investment Criteria.	CLO4
	Learning Activities: Brain-storming and Problem Solving	

Transaction Mode: Lecture, problem solving, discussion & demonstration, blended learning.

Suggested Readings:

1. Acemoglu, D., and Robinson, J. (2006). *The Role of Institutions in Economic Growth and Development*, Chapter-5, Growth Commission Resources, Vol.3, World Bank
2. Chang, Ha-Joon. (2006). *Institutional Change and Economic Development*, United Nations University Press.
3. Eckaus, P.S. and Parikh, K.S. (2003). *Planning for Growth*. 2nd Revised Ed., MIT.
4. Ghatak, S. (2003). *Introduction to Development Economics*, Routledge.
5. Griffin, K. and J.L. Enos. (1970). *Planning Development*. Addison-Wesley.
6. Meier, G. M. and Rauch, J. E. (2006). *Leading Issues in Economic Development* (8th Edition). New York: Oxford University Press.
7. Ray, D. (2004). *Development Economics*, Seventh Impression. New Delhi: Oxford University Press.
8. Ronald, G. (2010). *Development Economics*, Pearson, India
9. Thirlwall, A. P. (2006). *Growth and Development* (8th Edition). New York: Palgrave Macmillan.
10. Todaro, M. P. and Stephen C. S. (2007). *Economic Development* (8th Edition). New Delhi: Second Impression, Pearson Education.

Course Name: Statistical Methods for Economics

Course Code: ECO.422

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Apply various techniques of Central tendency, dispersion, correlation and regression using excel/SPSS
- CLO2: Construct index numbers using Excel/SPSS
- CLO3: Randomize the economic experiences/observations,
- CLO4: Evaluate the uncertainties associated with economic events.

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Central Tendency, Dispersion, Correlation and Regression: Measures of Central Tendency and Dispersion, Correlation and Regression Analyses; Properties of Correlation and Regression Coefficients, Partial and Multiple correlation, Multiple linear regression equation and coefficient of multiple determination. EPWRF Data base- Analysis of Correlation and Regression	CLO1
	Skill Enhancement Activities: Computer Literacy, Data Analysis, Problem Solving, and Critical Thinking through hands-on exercises using Excel/SPSS and Interpretation of results.	
II 12 Hours	Index Number and Time Series: meaning, problems in construction of an index number, Tests of consistency: Base shifting and splicing of Index Numbers. Time Series: Components of Time series, Measurement of trend by moving average method and the method of least squares. Curve fitting. Method of estimation of second degree parabolic, exponential and modified exponential curves; Method of computing average annual rate of growth and compound annual growth rate. CMIE Data base- Analysis of Growth	CLO2
	Skill Enhancement Activities: Computer Literacy, Data Analysis, Problem Solving, and Critical Thinking through hands-on exercises using Excel/SPSS and Interpretation of results.	
III 11 Hours	Probability :Introduction to Probability–Classical, Empirical and Axiomatic Definitions; Rules of Probability – Addition, Multiplication, Conditional, Independence, Bayes’ Theorem. Random Variable – Discrete and Continuous; Probability Distribution - Pdf, Pmf and Cdf; Mathematical Expectation of Random Variables and Their Functions; Mean and Variance, Moment Generating Function and Characteristic Function; Probability Distribution: Properties and applications of Binomial, Poisson and normal distributions.	CLO3
	Skill Enhancement Activities: Computer Literacy, Data Analysis, Problem Solving, and Critical Thinking through hands-on exercises using Excel/SPSS and Interpretation of results.	
IV 11 Hours	Sampling: Concepts and uses of sampling, difference between random and non-random sampling, simple random sampling, stratified random sampling and probability proportional to size sampling; Meaning and construction of confidence interval for sample mean. Elementary applications based upon the distribution of Z, t, χ^2 and F (including ANOVA) statistics.	CLO4
	Skill Enhancement Activities: Computer Literacy, Data Analysis, Problem Solving, and Critical Thinking through hands-on exercises using Excel/SPSS and Interpretation of results.	

Transaction Mode: Lecture, problem solving, discussion & demonstration, blended learning.

Suggested Readings:

1. Gupta, S. C. (2012). *Fundamentals of Statistics*. New Delhi: Himalaya Publishing House Pvt. Ltd.
2. Gupta, S. C., and Kapoor, V. K. (2009). *Fundamentals of applied statistics*. New Delhi: Sultan Chand and Sons.
3. Gupta, S.P. (2012). *Statistical Methods* (28th Edition). New Delhi: Sultan Chand and sons.
4. Knut S, and Peter J. H. (2007). *Mathematics for Economic Analysis*. India: Pearson Education.
5. Murray, S. S. (2014). *Probability, Schaum Series* (5th Edition). India: McGraw-Hill.
6. Murray, S. S. (2014). *Statistics, Schaum Series* (5th Edition). India: McGraw-Hill.
7. Nagar, A. L. and R. K. Das. (1993). *Basic Statistics*. New Delhi: Oxford University Press.
8. Jasraj, Lokesh (2020). *Data Analysis Using SPSS*, Sage Publications.
9. Guerrero, H. (2019). *Excel Data Analysis*, Springer Nature, Switzerland
10. Berk, K. & Carey, P. (2003). *Data Analysis with Microsoft Excel*, Duxbury Press

Course Name: Basic Econometrics**Course Code: ECO.521**

L	T	P	Credit
3	0	0	3

Course Learning Outcomes (CLO): On completion of this course, learners will be able to:

- CLO1: Understand the basic of regression models and derivation of parameters,
- CLO2: Familiar with the multiple regression modelling and issues on data handling,
- CLO3: Learn basis of diagnostic tests and carry out empirical modelling with software,
- CLO4: Understand Basics & Fit macro-econometric models for time series data with software.

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Linear Regression Model: Problem of estimation-Meaning, Nature and Scope of Econometrics; Concepts of Population Regression Function and Sample Regression Function; Simple (two variable) Linear Regression Model: Assumptions, Estimation, Properties (Gauss-Markov Theorem (BLUE) and Consistency); Interval estimation and Testing of hypothesis of individual coefficients (t-statistics); overall significance of the model (F-statistics), Coefficient of Determination and Goodness of fit through R-square and Adjusted R-square, Predictions. Testing of hypothesis of regression parameters	CLO1
	Skill Enhancement Activities: Critical thinking and Evaluation, Analytical skill, Problem Solving, decision making through hands-on practices using Excel, SPSS, STATA and e-views.	
II 12 Hours	Extension of regression models: Multiple (K-variable) Linear Regression Model: Assumptions, Estimation, Properties (Gauss-Markov Theorem (BLUE) and Consistency); Extension of regression models: regression through origin, Scaling and units of measurement, and functional forms in regression models: log-linear, and semi-log models; Choice of functional forms (MDW test); Dummy variable models: Dummy variable trap, Introduction to Non-Linear Regression Models, Dummy variable Models - ANOVA and ANCOVA, Applications including seasonal analysis, and checking for structural stability.	CLO2
	Skill Enhancement Activities: Critical thinking and Evaluation, Analytical skill, Problem Solving, decision making hands-on practices using Excel, SPSS, STATA and e-views.	
III 11 Hours	Relaxation of Assumptions of CLRM-Multicollinearity: Meaning, nature, causes, consequences and remedial measures (Ridge Regression); Heteroscedasticity: Meaning, nature, causes, consequences and remedial measures (Methods of weighted least square and generalised least square regression); Autocorrelation: Meaning, nature, causes, consequences and remedial measures; Econometric Modelling:	CLO3

IV 11 Hours	Model Specification and Diagnostic Testing.	
	Skill Enhancement Activities: Critical thinking and Evaluation, Analytical skill, Problem Solving, decision making hands-on practices using Excel, SPSS, STATA and e-views.	
	Basics of Time Series and Dynamics Models: Time series basic concepts: Stochastic Process (stationary and non-stationary process), Unit root process, Integrated Stochastic Process; Test of Stationarity: Graphical Analysis, and Unit root tests (Dickey-Fuller (DF) test, Augmented Dickey-Fuller (ADF) test, Phillips-Perron (PP) tests, Difference stationary and trend stationary process; Seasonality analysis; Dynamic Econometrics Models: Autoregressive and Distributed lag models; Simultaneous Equation models: Structural and reduced form equations, Identification (Rank and Order conditions) and Estimation problems; Methods of estimation: ILS and 2SLS methods.	CLO4
	Skill Enhancement Activities: Critical thinking and Evaluation, Analytical skill, Problem Solving, decision making hands-on practices using Excel, SPSS, STATA and e-views.	

Transaction Mode: Class Lecture, Blended Learning, Demonstration, Hands on practices using Excel, SPSS, STATA and e-views.

Suggested Readings:

1. Brooks, C. (2014). *Introductory econometrics for finance*. Cambridge university press.
2. Baltagi, B. (2008). *Econometric analysis of panel data*. John Wiley & Sons.
3. Enders, W. (2008). *Applied econometric time series*. John Wiley & Sons.
4. Gujarati, D. (2014). *Econometrics by example*. Palgrave Macmillan.
5. Gujarati, D. N. & Sangeetha. (2007). *Basic econometrics*, TMH.
6. Gujarati, D. N., & Porter, D. (2009). *Basic Econometrics*, Mc Graw-Hill International Edition.
7. Johnston, J. and Dinardo, J. (1996). *Econometric Methods*, McGrawHill/Irwin Publications.
8. Nachane, D. M. (2006). *Econometrics: theoretical foundations and empirical perspectives*. OUP Catalogue.
9. Wooldridge, J. M. (2015). *Introductory econometrics: A modern approach*. Nelson Education.

Web links:

1. <https://davegiles.blogspot.com/>
2. <https://www.stata.com/links/>
3. <https://www.eviews.com/Learning/index.html>

Course Name: Research Methodology in Economics

Course Code: ECO.522

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Identify an appropriate research problem, Formulate the research hypotheses,
- CLO2: Craft out a feasible research design,
- CLO3: Carry out data collection,
- CLO4: Analysis and interpretation, and prepare a research report.

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Meaning and Types of Research, Scope of Research in Economics, Significance/Utility of Research in Economics, Qualities of a researcher, Research Approaches – Inductive and Deductive approaches; Research Process – Literature Review – traditional & thematic approaches, identification and selection of research problem, Hypothesis Formulation.	CLO1
	Learning Activities: Brain-storming and Problem Solving	

II 12 Hours	Research Design: Qualitative, Quantitative and Mixed Research Designs; Meta-analysis; Ex-post facto studies; Sampling Methods – Probability and non-probability sampling methods.	CLO2
	Learning Activities: Brain-storming and Problem Solving	
III 11 Hours	Data in Research: Sources of Data – Primary and Secondary; Methods of Primary Data Collection, Secondary Data Sources – India and abroad, Tools of primary data collection; Reliability and validity of tools for research; Classification, Tabulation, and Presentation of data.	CLO3
	Learning Activities: Brain-storming and Problem Solving	
IV 11 Hours	Data Analysis: Qualitative, Quantitative and Mixed Methods; Concept of measurement, causality, generalization, replication. Merging the two approaches – Quant-Qual Technique; Interpretation of Results; Report Writing: Types of reports, Steps in report writing, Citation Styles, Bibliography and Appendix. Research and Publication Ethics: Research Misconducts – Falsification, Fabrication & Plagiarism (FFP); Publication Misconducts; Golden rules of research and publication ethics.	CLO4
	Learning Activities: Brain-storming and Problem Solving	

Transaction Mode: Lecture, case study, problem solving, group discussion & demonstration, self-study, blended learning.

Suggested Readings:

1. Bruce, B. & Howard, L. (2014). *Qualitative Research Methods for the social sciences*, London: Pearson.
2. Bryman & Bell. (2018). *Business Research Methods*, Oxford University Press.
3. Flick, U. (2014). *An introduction to qualitative research*. Sage Publications.
4. Flick, U. (2015). *Introducing research methodology: A beginner's guide to doing a research project*. Sage Publications.
5. Gregory, I. (2005). *Ethics in research*. London: Continuum.
6. Greenlaw, S. A. (2005). *Doing Economics: A Guide to Understanding and Carrying Out Economics Research*, South-Western Cengage Learning
7. Gupta, S.L. & Gupta, H. (2011). *Research Methodology: Texts and Cases with SPSS*. Delhi: International Book House.
8. Guthrie, G. (2010). *Basic research methods: An entry to social science research*. SAGE Publications India.
9. Kothari, C. R. & Garg, G. (2014). *Research Methodology: Methods and Techniques*, New Age Publications.
10. Neuman, W.L. (2014). *Social Research Methods: Qualitative and Quantitative Approaches*, Pearson New International Edition.
11. Sana, L. (2019). *Text book of Research Ethics: Theory & Practice*, Springer.
12. Sjoberg, G. & Nett, R. (2014). *A methodology for social research*. Jaipur: Rawat Publications.
13. Stokes, P. & Wall, T. (2014). *Research Methods*, Plagave Publication.

Course Name: Money and Banking

Course Code: ECO.523

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Comprehend the theories of money supply,
- CLO2: Explain the theories of demand for money,
- CLO3: Assess the functioning of a financial system,
- CLO4: Evaluate the effectiveness of monetary policy in a country.

Units/Hours	Contents	Mapping with CLO
I	Introduction to Money: Meaning, Nature and functions; Quantity Theory of Money – Classical, Keynesian, Monetarists; Theories of	CLO1

12 Hours	Money Supply, Components of Money Supply; Measures of Money Supply; Determinants of Money Supply; Money Multiplier. Liquidity Approach to Monetary Theory - Gurley-Shaw Thesis, Radcliffe Committee Approach.	
	Learning Activities: Brain Storming and Problem Solving.	
II 11 Hours	Demand for Money: Classical Theory, Keynes' Theory, Inventory Approach, Portfolio Balance Theory, Friedman's Theory; Monetary Policy – Meaning, Objectives, and Instruments; The structure of interest rate – term structure and yield curve; Theories of term structure of interest rates.	CLO2
	Learning Activities: Brain Storming and Problem Solving.	
III 11 Hours	Financial System: Financial Markets – Functions and Types; Different theories & Approaches; Money Market and Capital Market – nature, functions and instrument; Structure of Indian money and capital markets; Theoretical perspectives on financial and real sectors.	CLO3
	Learning Activities: Brain Storming and Problem Solving.	
IV 11 Hours	Banking: Theories of Banking; Commercial and Central Banking Systems – Functions, Credit Creation and Credit Control; Banking and Non-Banking Financial Intermediaries in India; RBI – Functions, Monetary Policy – Methods and Recent Policy Changes in India; International Monetary policy transmission mechanism. Impact of world bank and IMF.	CLO4
	Learning Activities: Brain Storming and Problem Solving.	

Transaction Mode: Course content will be delivered using presentation, lectures, case study, debates, brain-storming, simulation, role playing and direct observation, blended learning.

Suggested Readings:

1. Bhole, L. M. (2004). *Financial Institutions and Markets: Structure, Growth and Innovations*. India: Tata McGraw-Hill Education.
2. Gautam, S.K. (2012). *Money, banking and finance*. Mumbai, Vakratund publishers.
3. Hajela, T.N (2009). *Money and banking: Theory with Indian banking*. New Delhi, Ane books Pvt. Ltd.
4. Hajela, T.N. (2015). *Money banking and public finance*, New Delhi, Ane Books Pvt. Ltd.
5. Iyenagar (2011). *Money matters: Macroeconomics and financial markets*, New Delhi, Sage publications.
6. Mithani, D.M. (2013). *Money, Banking, international trade and public finance*, New Delhi, Himalaya publishing house
7. Poonia, V. (2012). *Money banking in India*. New Delhi, Srishti books distributors.
8. Popli, G. S., Jain, A. (2015). *Principles and Systems of Banking*, PHI Publishing.
9. Uppal, R.K (2011). *Money banking and finance: evolution and present structure*, New Delhi, new century publications.
10. Zola, Emile (2014). *Money*, New Delhi, Oxford University press.

Course Name: Indian Economic Development and Policy

Course Code: ECO.524

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Elucidate the pattern and structure of Indian economy,
- CLO2: Focus on issues, challenges and policy responses in India,
- CLO3: Describe the role of infrastructure development in India, and
- CLO4: Assess the centre-state financial relations in India.

Units/Hours	Contents	Mapping with CLO
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I 11 Hours	Economic Growth in India: Land revenue systems during the colonial period, Land reforms and policies after the independence; Agriculture – pattern & structure of growth, major challenges, policy responses; Industry - Pattern & structure of growth, major challenges, policy responses; Services - Pattern & structure of growth, major challenges, policy responses. Impact of Covid-19 on Indian Economy. Black Money and its impact on the economy, Brain Drain and Brain Grain. India and the Global Economy. Thinking forward towards Viksit Bharat@2047, Dream or Reality.	CLO1
	Learning Activities: Brain-storming and Problem Solving	
II 12 Hours	Rural Development: Issues, Challenges and Policy Responses; Urban Development – Issues, Challenges and Policy Responses; Poverty, Inequality and Unemployment; Reforms in Land, Labour and Capital Markets. Peer discussion on Various Issues of Rural Development.	CLO2
	Learning Activities: Brain-storming and Problem Solving	
III 11 Hours	Infrastructure Development: physical and social; public-private partnerships; Natural Resources; Foreign capital in India; and Foreign Direct and Portfolio Investments.	CLO3
	Learning Activities: Brain-storming and Problem Solving	
IV 11 Hours	Centre-State Financial Relations: 15 th Finance Commissions of India: FRBM; Foreign Trade in Goods and Services; Balance of Payment; WTO and Indian Economy; Restrictions on Monopolies and Concentration of economic power; Competition Act 2002; Regional imbalances; Trends in migration; Economic Development and Environment Degradation; SHGs and Women empowerment. Understanding the various views on Various aspects of Centre State Financial Relations.	CLO4
	Learning Activities: Brain-storming and Problem Solving	

Transaction Mode: Course content will be delivered using presentation, lectures, case study, debates, brain-storming, simulation, role playing and direct observation, blended learning.

Suggested Readings:

1. Banik, N. (2015). *The Indian Economy: A Macroeconomic Perspective*. Sage Publication.
2. Husain, M. H., & Sarwar, F. H. (2012). A comparative study of Zamindari, Raiyatwari and Mahalwari land revenue settlements: the colonial mechanisms of surplus extraction in 19th century British India. *Journal of Humanities and Social Science*, 2(4), 16-26.
3. IMF (2023). *World Economic Outlook, Navigating Global Divergences*. International Monetary Fund.
4. Datt, G., and Majajan, A. (2019). *Indian Economy*. New Delhi: S. Chand and Co.
5. *Economic and Political Weekly*, various issues. *Millennial Asia*, various issues.
6. Kapila, U. (2011). *Indian Economy: Performance and Policies*. Academic Foundation, India.
7. Singh, R. (2017). *Indian Economy*. New Delhi: Tata McGraw-Hill Education.
8. Verma, S. (2017). *The Indian Economy*. Unique Publishers, India.

Course Name: Rural Development and Policies

Course Code: ECO.525

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Learn the nature of rural development in India,
- CLO2: Concepts underlying rural development,
- CLO3: Various agricultural and rural development policies,
- CLO4: Industrialisation and entrepreneurship.

Units/Hours	Contents	Mapping with CLO
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I 12 Hours	Rural Development: Rural social structure, occupations, interconnectedness, rural socio-economic issues; Rural Economy: rural social structure; rural dynamics: structural transformations; response to changing Agrarian Economy; Rural Farm and Non-Farm Sector: Employment and Barriers; Rural Employment Generation Programmes: NRLM, MGNREGA; Rural Development Policies.	CLO1
	Learning Activities: Brain-storming and Problem Solving	
II 11 Hours	Approaches to Understand rural development: Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA); Sustainable Rural development, Technology for rural growth: ICT, mobile, successful programmes; Business Markets for village economy.	CLO2
	Learning Activities: Brain-storming and Problem Solving	
III 11 Hours	Planning for Rural Development: levels, functions, decentralization, methodology of micro-level planning, for block and district level planning; Organizations for rural development: criteria, government organisations, PRIs, Cooperatives, Voluntary Agencies/NGOs, Corporations; Community Capacity Building, Common Property Resources.	CLO3
	Learning Activities: Brain-storming and Problem Solving	
IV 11 Hours	Rural Entrepreneurship: role, programmes, role of institutions, Agri Entrepreneurship; Rural Innovations; Micro-Finance Institutions (MFIs): role of MFIs, Self Help Groups; Micro, Small and Medium Enterprises in Rural India; Rural and micro-Insurance; Rural Industrialization.	CLO4
	Learning Activities: Brain-storming and Problem Solving	

Transaction Mode: Lecture, case study, problem solving, group discussion & demonstration, self-study, blended learning.

Suggested Readings:

1. Churchill, Craig. (2006). *Protecting the poor: A micro insurance compendium*, International Labour Office, Geneva.
2. Government of India (n.d.) MSME at a Glance, Ministry of Micro, Small and Medium Enterprises.
3. IDFC Rural Development Network. (2013). *India Rural Development Report 2012/13*. Delhi: Orient Black Swan.
4. Jodhka, S.S. (2012). *Village Society*, Orient Black Swan.
5. Jodhka, S.S. (2018). *A Handbook of Rural India* (Readings on the Economy, Polity and Society), Orient Black Swan.
6. Lazaro, E., Agergaard, J., Larsen, M. N., Makindara, J., & Birch Thomsen, T. (2018). *Urbanisation in Rural Regions: The Emergence of Urban Centres in Tanzania*. The European Journal of Development Research, 1-23.
7. Mukherjee, A. (2004). *Participatory rural appraisal: methods and applications in rural planning: essays in honour of Robert Chambers* (Vol. 5). Concept Publishing Company.
8. Narula, U. (2010). *Dynamics of Indian Rural Economy: Growth Perspective*, Atlantic Publishers, New Delhi.
9. Parthasarathy, G. (2003). *Economic Reforms and Rural Development in India*. Academic Foundation.
10. Reddy, K. V. (2012). *Agriculture and Rural Development*, Himalaya Publishing House.
11. Schaeffer, P.V. and Loveridge, S. (2000). *Small Town and Rural Economic Development: A case studies Approach*, Praeger Publisher.
12. Singh, B.M. and Namboodiri, KVN. (2007). *Unleashing Rural Entrepreneurship*, ICFAI University Press, Hyderabad.
13. Singh, Katar. (2009). *Rural Development: Principles, Policies and Management*, Sage Publications.

Course Name: Economics of Innovation**Course Code: ECO.526**

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Understand the Economics of Innovation
- CLO2: Understand the relations between technological change, and
- CLO3: Economic development,
- CLO4: Evaluate the STI policy.

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Nature of Innovation: Theories of innovation, Theories of National Innovation System, Genesis of R&D and innovation concepts.	CLO1
	Learning Activities: Brain-storming and Problem Solving	
II 11 Hours	Innovation: Firm and market characteristics, international aspects on Innovation, trade.	CLO2
	Learning Activities: Brain-storming and Problem Solving	
III 12 Hours	Innovation and Intellectual property rights: Policymaking in the area of STI (Science, Technology and Innovation), The role of state and public-private partnerships for STI.	CLO3
	Learning Activities: Brain-storming and Problem Solving	
IV 11 Hours	Measuring economic effects of R&D and innovation: Digitalization and innovation.	CLO4
	Learning Activities: Brain-storming and Problem Solving	

Transaction Mode: Lecture, case study, discussion, field visits and demonstration, blended learning.

Suggested Readings:

1. Fagerberg, Jan, David C. Mowery and Richard R. Nelson (eds.). (2005). *The Oxford Handbook of Innovation*, Oxford University Press.
2. <http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199286805.001.0001/oxford-hb-9780199286805>.
3. Freeman, Chris and Luc Soete. (2000). *The Economics of Industrial Innovation*, 3rd ed., The MIT Press.
<https://ebookcentral.proquest.com/lib/hselibraryebooks/reader.action?docID=3061321&query=chris+freeman>.
4. Greenhalgh, Christine and Mark Rogers (eds). (2010). *Innovation, Intellectual Property and Economic Growth*, Princeton University Press. <https://epdf.tips/download/innovation-intellectual-property-and-economic-growth.html>.
5. Hall, Bronwyn H. and Nathan Rosenberg (eds). (2010). *Handbook of the Economics of Innovation*, Elsevier. <https://www.sciencedirect.com/handbook/handbook-of-the-economics-of-innovation>.
6. Henri Delanghe, Ugur Muldur, and Luc Soete (eds). (2009). *European Science and Technology Policy*, Edward Elgar. <https://www.elgaronline.com/view/9781848443303>

Course Name: International Trade and Investment**Course Code: ECO.527**

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Comprehend the theories of international trade,
- CLO2: Identify the emerging patterns of international trade,
- CLO3: Examine the prospects of regional integration,
- CLO4: Elucidate the role of international investment.

Units/Hours	Contents	Mapping with CLO
I	Conceptualization of Trade: Classical, Neo Classical and New	CLO1

11 Hours	Theories of trade, Terms of trade, Prebisch and Singer views on terms of trade, Environmental and Social issues of trade.	
	Learning Activities: Brain-storming and Problem Solving	
II 11 Hours	Emerging Pattern of Trade: Classification of Trade in Services, High Technology Products, Trade in Climate Smart Goods, changing nature of trade in emerging economies, Trade between developed vs. developing economies. Role of Global Value Chain in Trade,	CLO2
	Learning Activities: Brain-storming and Problem Solving	
III 11 Hours	Regional Integration: North- North, South- South and North-South. EU, ASEAN, NAFTA, SAARC, BIMSTEC, RCEP, BRICS, Brexit and India, USA- China Trade War.	CLO3
	Learning Activities: Brain-storming and Problem Solving	
IV 12 Hours	Investment and Development: Relation between FDI and Rand D, Financial Crisis, Contribution of Various Nobel Laureates in International economics - Joseph E. Stiglitz & Paul Krugman; India's EXIM and FDI policy. Covid-19 Pandemics and Trade.	CLO4
	Learning Activities: Brain-storming and Problem Solving	

Transaction Mode: Lecture, case study, discussion, blended learning.

Suggested Readings:

- Alex, E. F. Jilberto, and Andre M. (1998). *Regionalization and Globalization in the Modern World Economy: Perspectives on the Third World and Transitional Economies*, Routledge.
- Bank, W. (2008). *World Integrated Trade Solution* (WITS) Database.
- Bhagwati, J.N. (1998). *International Trade: Selected Readings*, McMillan University Press.
- Bhatia, S.K. (2017). *Brexit and India: Analyzing the Implications* (Eds.), New Delhi Publishers.
- Cole, Matthew and Robert J. R. E. (2003). *Do Environmental Regulations Influence Trade Patterns: Testing Old and New Trade Theories*, The World Economy: 1163-86.
- Copeland, B. and S. Taylor. (1994). *North-South trade and the Environment*, Quarterly Journal of Economics, 755-787.
- Copeland, B. and S. Taylor. (1995). *Trade and Trans boundary Pollution*, American Economic Review, 716-737.
- Copeland, B., S. Taylor, and W. Antweiler. (2001). *Is Free Trade Good for the Environment?* American Economic Review, 877-908.
- Debroy, B. (2005). *WTO at Ten: Looking Back To Look Beyond - Development Through Trade (Volume 1) (2 Volume Set)*, Konark Publishers.
- Debroy, B. (2006). *The Trade Game: Negotiation Trends at WTO and Concerns of Developing Countries*, Published by Academic Foundation.
- Feenstra, R. (2004). *Advanced International Trade, Theory and Evidence*, Princeton University Press.
- Choi (2000). *Handbook of International Economics* (1st Edition), Volume 1, 2, 3 & 4. New Delhi, ND: Elsevier publications.
- Harry, P. Bowen and A. Hollander, and Jean MaveViane. (2012). *Applied International Trade Analysis*, Published by Palgrave Macmillan.
- James, C. and Robert M. (2004). *International Economics*, John Wiley & Sons. Inc., Dunn, Jr.
- Jones, R.W. and Kenen, P.B. (2003). *Handbook of International Economics*, Volumes-I, II and III, Elsevier Amsterdam.
- Krugman, P. R. and Maurice Obstfeld. (2003). *International Economics: Theory and Policy*, Sixth Edition, Addison Westley.
- Prakash, J. V., Nauriyal, D. K., & Kaur, S. (2017). *Assessing Financial Integration of BRICS Equity Markets: An Empirical Analysis*. Emerging Economy Studies, 3(2), 127-138.
- RIS, *South Asia Trade and Development Report*, Various Issues.
- Robert. C. Feenstra. (2004). *Advanced International Trade, Theory and Evidence*, Published by Princeton University Press.
- Robert. C. Feenstra, and Alan, M.Taylor. (2011). *International Economics*, 2nd edition, Worth Publishers.

21. Salvatore, D. (2013). *International Economics* (11th Edition). USA: Wiley.
22. Sandeep, K. (2015). Migration and Bilateral Trade Flows: Evidence from India and Oecd Countries. *Applied Econometrics and International Development*, 15(2), 179-196.
23. Singh, K., & Kaur, B. S. (2017). Whether FDI or Exports Enhance Innovation: Evidence from Indian Manufacturing Firms, 2001-2012. *Revista Galega de Economía*, 26(3), 19-32.
24. Stevens, Candice. (1993). *The Environmental Effects of Trade*, The World Economy, 16(4): 439-451.
25. UNCTAD, Trade and Development, Various Issues.
26. Impact of covid-19 pandemic on trade and development, unctad report [osg2020d1_en.pdf \(unctad.org\)](#)
27. [COVID-19 and international trade Issues and actions - OECD \(oecd-ilibrary.org\)](#)
28. Bianchi, J. (2011). “Overborrowing and Systemic Externalities”, American Economic Review, 101, 3400-3426.
29. Mendoza, E. (2010). “Sudden Stops, Financial Crisis and Leverage”, American Economic Review, 100, 1941-1966.
30. Eggertsson, G. and P. Krugman. (2011). “Debt, Deleveraging and the Liquidity Trap: A Fisher-Minsky-Koo Approach”, Quarterly Journal of Economics.

Course Name: Punjab Economy

Course Code: ECO.528

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: understand nature and characteristics of Punjab economy,
- CLO2: understand the patterns of structural changes in Punjab economy,
- CLO3: understand the problems and prospects of Punjab economy,
- CLO4: understand the patterns of economic development in Punjab.

Units/Hours	Contents	Mapping with CLO
I 12 Hours	Structural Changes and Economic Development in Punjab's Economy: Major challenges and potentials; Structure and Production of Economic Activities; Agriculture in Punjab: structure of agriculture in Punjab, Growth and Productivity.	CLO1
	Learning Activities: Peer review and discussion, brain-storming and problem solving.	
II 11 Hours	Green Revolution: Progress, Performance and Implications; Agricultural Diversification: Rationale, Constraints and Prospects; Dairy Farming and Other Allied Activities; Agriculture Credit and Marketing; Agrarian crisis-nature, effects and measures, Land Reforms in Punjab.	CLO2
	Learning Activities: Peer review and discussion, brain-storming and problem solving.	
III 12 Hours	Industry in Punjab: Structure of Industry in Punjab, MSME- Role, Problem and Future Prospects; State and Industrial Development; Agro-based Industries – Nature, growth, problem, and prospects; Service Sector in Punjab: Nature, growth, problem, and prospects.	CLO3
	Learning Activities: Peer review and discussion, brain-storming and problem solving.	
IV 10 Hours	Social Sector in Punjab: Education, Health, Sanitation and Water Supply, Social Security, Employment, Migration, and Welfare Schemes; Banking and Finance – Nature, growth, problems and prospects.	CLO4
	Learning Activities: Peer review and discussion, brain-storming and Problem Solving	

Transaction Mode: Lecture, case study, discussion, field visits and demonstration, blended learning.

Suggested Readings:

1. Bawa R. S., P. S. Raikhy & Dhindsa, P. (2001). *Globalization and Punjab Economy*. India: Punjab School of Economics, (DRS-UGC), Guru Nanak Dev University.
2. Bawa, R. S. & Raikhy, P. S. (2000). *Punjab Economy: Emerging Issues*. India: South Asia Books G.N.D.U.
3. Bhalla, G.S., Chadha, G. K., Kashyap, S.P. and Sharma, R.K. (1990). *Agricultural Growth and Structural Changes in the Punjab Economy: An Input-Output Analysis*, IFPRI and CSRD, JNU.
4. Chadha, G. K. (1986). *The State and Rural Transformation: The Case of Punjab, 1950-85*, Sage Publication.
5. Deshpande, R. S. & Arora, S. (2010). *Agrarian Crisis and Farmer Suicides*. New Delhi: SAGE Publications India Private Limited.
6. Dhesi, A. S. and Singh, G. (2007). *Rural Development in Punjab: A Success Story Going Astray*, Routledge
7. Dutt, P. S. and Gill, S.S. (1995). *Land Reform in India: Intervention for Agrarian Capitalist Transformation in Punjab and Haryana*, Sage Publication
8. Hoover, F.M. (2010). *An Introduction to Regional Economics*. Ryerson: McGraw-Hill.
9. Johar, R.S. & Khanna, J. S. (1983). *Studies in Punjab Economy*. Guru Nanak Dev University.
10. Kaur, Paramjit. (2013). *Punjab Economy: Performance and Prospects*, Regal Publisher.
11. Singh, I., Singh, S. and Singh, L. (2014). *Punjab's Economic Development in the Era of Globalization*, L G Publishers.
12. Singh, L. & Bhargoo, K.S. and Sharma, R. (2016). *Agrarian Distress and Farmer Suicides in North India*, Routledge India
13. Singh, L. and Singh, N. (2016). *Economic Transformation of a Developing Economy: The Experience of Punjab, India*, Springer.
14. Singh, L., & Singh, S. (2002). *Deceleration of economic growth in Punjab: Evidence, explanation, and a way-out*. *Economic and Political Weekly*, 37(6), 579-586.

Course Name: Population Studies

Course Code: ECO.529

L	T	P	Credit
3	0	0	3

Course Learning Outcomes:

On completion of this course, learners will be able to:

- CLO1: comprehend the theories of demographic transition,
- CLO2: Prepare projections for population growth,
- CLO3: Evaluate the population policies in India,
- CLO4: Explain the dynamics of population change.

Units/Hours	Contents	Mapping with CLO
I 12 Hours	Basic Concepts, Indicators and Theories: Meaning and Scope of demography, Population and Economic Development; Vital Rates – Fertility, Mortality, Age Pyramids, and Life Tables; From Development to Population; Theory of Demographic Transition; Historical Trends; Adjustment of Birth and Death Rates; Household Choice Models; From Population to Development; Malthusian View; Growth Impact; Population and Environment; Population and Innovation; Markets and Inputs.	CLO1
	Learning Activities: Peer discussion and case analysis, brain-storming and problem solving.	
II 11 Hours	Population Projection: National Projection of Total Population and Age-Sex composition – Mathematical Methods and Cohort-Component Methods; Methods of National & Sub-National Projection of Population; Projection of the Economically Active Population; Concepts of Stable, Stationary, and Quasi-Stationary Population.	CLO2
	Learning Activities: Peer review of various problems, brain storming and problem solving.	

III 11 Hours	Population and Population Policy in India: Major demographic features of India's population – Spatial, Age, Sex, Structure of Indian Population; Birth rate, Death rate, Life Expectancy & Infant Mortality; Trends & Patterns; Evaluation of family welfare programmes in India - National Population Policies since independence.	CLO3
	Learning Activities: Peer discussion and case analysis, brain storming and problem solving.	
IV 11 Hours	Aging and Demographic Change: Aging Process, Ageing around the world, The impact of demographic changes, The changing balance of age groups, Social, Economic, and Demographic Changes among the Elderly, Dependency ratio, Generational accounting and Pensions crisis; Social Groups and Family Size.	CLO4
	Learning Activities: Peer discussion and case analysis, brain storming and problem solving.	

Transaction Mode: Lecture, problem solving, group discussion.

Suggested Readings:

1. Bogue, D.J. (1971). *Principles of Demography*, John Wiley, New York.
2. Bose, A. (1996). *India's Basic Demographic Statistics*, B.R. Publishing Corporation, New Delhi
3. Choubey, P. K. (2000). *Population Policy in India*. New Delhi: Kanishka Publications.
4. Cochrane, S. H. (1975). Children as by-products, investment goods and consumer goods: a review of some micro-economic models of fertility. *Population Studies* 29(3): 373-390.
5. Dandekar, V.M. (1998). *Population Front of India's Economic Development*. *Economic and Political Weekly*. 22(17): 837-842.
6. Dave, P., & Mehta, P. (2008). *Mental Health and Aging Women: Important Correlates*. New Delhi: Gyan Publishing House.
7. Ehsanul, H. (2007). *Sociology of Population*. New Delhi: Macmillan.
8. Hustedde, Ronald J., Ron Shaffer and Glen Pulver. (2005). *Community Economic Analysis: A How to Manual*. Rev. ed
9. Ishwar M. (2001). *Ageing and Human Development: Global Perspectives*. New Delhi: Rawat.
10. Novell, C. (1988). *Methods and Models in Demography*, Bellhaven Press, London.
11. Simon, J. L. (1992). *Population and Development in Poor Countries*. Princeton: Princeton University Press.
12. Srinivasan, K. and A. Shariff (1998). *India: Towards Population and Demographic Goals*, Oxford University Press, New Delhi.
13. Srinivasan, K., (1992). *Basic Demographic Techniques and Applications*, Sage Publications, New Delhi.
14. Weil, David N. (1997). "The Economics of Population Aging" in Mark R. Rosenzweig and Oded Stark, eds., *Handbook of Population and Family Economics*, New York: Elsevier, 967-1014.

Course Name: Advanced Econometrics

Course Code: ECO.530

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, students will be able to:

- CLO1: Understand the basic of time series regression models and model fitting using data,
- CLO2: Familiar with regression modelling using qualitative dependent variables,
- CLO3: Perform dynamic regression modelling using Panel/Pooled data.
- CLO4: Build up software skills in data analysis to carry out economic and business research.

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Time Series Econometric Modelling: Approaches to time Series Forecasting; Univariate Time series modelling: AR, MA, ARMA and ARIMA models; Box-Jenkin Methodology; Multivariate Time series modelling: OLS, Spurious Regression, Co-integration, Causality	CLO1

	analysis (Granger and Sim); Granger representation theorem; Vector Auto-regression (VAR) and Vector Error Correction Models (VECM); Volatility modelling: ARCH and GARCH models. Time series model fitting using country and firm level data.	
	Learning Activities: Lectures, Problem Solving and Practical.	
II 11 Hours	Limited Dependent variable Models: Nature of qualitative response Models; Linear Probability Model and its applications; Simple and Multinomial Logit models, and Simple and Bivariate Probit Models: Assumptions, Estimation (grouped and un-grouped models), diagnostic checking, interpretations and applications; Tobit model: Assumptions, Estimation, diagnostic checking interpretations and applications; Conditional logit and probit models; Instrumental variable logit and probit models and their applications. Introduction to quintile regression.	CLO2
	Learning Activities: Lectures, Problem Solving and Practical.	
III 11 Hours	Panel data modelling: Basics of panel data analysis and Panel Unit root tests; Estimation of panel data regression models: Pooled regression method, fixed effect Approach, and Random effect models; Dynamic Panel data modelling; Panel co-integration, Panel Vector Auto-regression (VAR) and Panel Vector Error Correction Models (VECM), Fully Modified Ordinary Least Square (FMOLS) regression, Dynamic OLS models; Limited dependent variable models using Panel data; GMM estimations.	CLO3
	Learning Activities: Lectures, Problem Solving and Practical.	
IV 12 Hours	Applications: Introduction to E-views, STATA and R; Time series econometric modelling using E-views; Estimation of Limited Dependent Variable Models using STATA; Panel Data Modelling using E-views, STATA and R.	CLO4
	Learning Activities: Demonstration, Hands on with econometric software.	

Transaction Mode: ClassLecture, Blended learning, Hands on with econometric software like STATA, e-views & R.

Suggested Readings:

1. Baltagi, B. (2008). *Econometric analysis of panel data*. John Wiley & Sons.
2. Brooks, C. (2014). *Introductory econometrics for finance*. Cambridge university press.
3. Cameron, A. C., & Trivedi, P. K. (2010). *Microeconometrics using stata* (Vol. 2). College Station, TX: Stata press.
4. Enders, W. (2008). *Applied econometric time series*. John Wiley & Sons.
5. Gujarati, D. (2014). *Econometrics by example*. Palgrave Macmillan.
6. Gujarati, D. N. & Sangeetha (2007). *Basic econometrics, 4e*, 304-331.
7. Hall, R., Lilien, D., Sueyoshi, G., Engle, R., Johnston, J., & Ellsworth, S. (1999). EViews manual. *Quantitative Micro Software Inc*, 312.
8. Hsiao, C. (2014). *Analysis of panel data* (No. 54). Cambridge university press.
9. Kawakatsu, H. (1998). *A computer handbook using EViews: to accompany Econometric models and economic forecasts*, Pindyck and Rubinfeld. McGraw-Hill College.
10. Long, J. S., & Freese, J. (2006). *Regression models for categorical dependent variables using Stata*. Stata press.
11. Madala, G. S. (1968). *Limited Dependent and Qualitative Variables in Econometrics*. Cambridge: Cambridge University Press
12. Madala, G. S. (2009). *Introduction to Econometric*.
13. Stata, A. (2015). Stata Base Reference Manual Release 14.
14. Venables, W. N., Smith, D. M., & R Development Core Team. (2004). *An introduction to R*.
15. Wooldridge, J. (2009). Advanced panel data methods. *Introductory econometrics: a modern approach*. Mason: South-Western Cengage Learning, 489.

16. Wooldridge, J. (2009). Instrumental variables estimation and two stage least squares. *Introductory Econometrics: A Modern Approach*. Nashville, TN: South-Western.
17. Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data*. MIT press.
18. Zucchini, W., MacDonald, I. L., & Langrock, R. (2016). *Hidden Markov models for time series: an introduction using R* (Vol.150). CRC press.

Web links:

1. <https://davegiles.blogspot.com/>
2. <https://www.stata.com/links/>
3. <https://www.eviews.com/Learning/index.html>
4. <https://campus.datacamp.com/courses/introduction-to-the-tidyverse/data-wrangling-1?ex=1>

Course Name: Welfare Economics

Course Code: ECO.531

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, students will be able to:

CLO1: understand pre-Paretian welfare economics

CLO2: comprehend Paretian welfare economics

CLO3: interpret Paretian welfare economics

CLO4: construct and apply social welfare functions

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Pre-Paretian Welfare Economics: Benthamite Approach to Aggregate Welfare; Optimum Resource Allocation and Welfare maximization, Assumption of Uniform Income-Utility Function of Individuals; Question of Income Distribution; issue of Interpersonal comparisons of Utility.	CLO1
II 11 Hours	Paretian Welfare Economics-I: Marshallian Welfare Economics; Consumer's Surplus : Measurement of Consumer's Surplus-difficulties involved, Criticism; Principle of Compensating variation; Hicks's Four consumers surpluses; concept of Consumer's Surplus; Consumer's Surplus and Tax Bounty Analysis.	CLO2
III 12 Hours	Paretian Welfare Economics-II: Pareto Optimality exchange conditions, the production optimum, the consumption optimum, Concept of Contract curve; Top level optimum; Infinite number of non-comparable optima Vs unique social optimum.	CLO3
IV 11 Hours	Social Welfare Function: Compensation criteria-Contributions of Barone, Kaldor and Hicks. The Scitovsky double criterion, Concept of Commodity indifference map, Samuelson's. utility possibility curve; value judgements and welfare economics, Bergson's social welfare function Arrow's possibility theorem, Recent Developments in welfare Economics.	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Arrow, K. J. (1951), Social Choice and Individual Values, Yale University Press, New Haven.
2. Baumol, W.J. (Ed) (2001) Welfare Economics, Edward Elgar Publishing Ltd., UK.
3. Broadway, R.W and N.Bruce (1984), Welfare Economics, Basil Blackwell, Oxford.
4. Duesenberry J.S. (1949), Income, Saving and the Theory of Consumer Behavior, Harvard University Press, Cambridge, Mass.
5. Feldman, A.M. (1980), Welfare Economics and Social Choice Theory, Martinus Nijhoff, Boston.
6. Little, I. M. D. (1939) A Critique of Welfare Economics (2nd Edition), Oxford University Press
7. Marshall, A. (1946), Principles of Economics, Macmillan, London.
8. Myint, H. (1948), Theories of Welfare Economics, Longmans, London Ng. Y. K. (1979), Welfare Economics, Macmillan, London.

9. Pigou A.C. (1962), The Economics of Welfare (4th Edition), Macmillan.
 10. Quirk, J. and R. Saposnik (1968), Introduction to General Equilibrium Theory and Welfare Economics, McGraw Hill, New York.

Course Name: Economics of Human Development and Knowledge Economy

L	T	P	Credit
3	0	0	3

Course Code: ECO.532

Course Learning Outcomes: On completion of this course, students will be able to:

CLO1: understand the basic concepts of human development

CLO2: construct human development index

CLO3: analyse the status of human development in India and its States & UTs

CLO4: assess the impact of human development on economic development

CLO5: know the main indicators characterizing the knowledge economy, global and national innovations systems;

CLO6: understand the significance of innovation for economic growth, the increase in competitiveness of national economies and businesses;

CLO7: determine the strategies for transition to the knowledge economy at the national and global levels

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Concepts Of Human Development: Development Human Development and Economic Development: Physical Quality of life index, Human Resource Development; Usefulness of Concept-Theories of Human Development-Gender Empowerment Measure. Human Development Index: Limitations of Human Development measure-Political Freedom index Human Development index and Poverty index-Human Poverty index.	CLO1 CLO2
II 12 Hours	Status of Human Development in India and its States & UTs: Human Development and Human Rights. The State and Progress of Human Development. Impact of Human Development on Economic Development: Expenditure in India and States (Public spending) Social Capital – Economic Attainments and Well-being. Development Expenditure in India and States (Public spending) Social Capital – Economic Attainments and Well-being.	CLO3 CLO4
III 11 Hours	Knowledge Economy – Meaning, Definition and Characteristics of Knowledge Economy; The Power and Reach of Knowledge; Acquiring Knowledge, Absorbing Knowledge, Communicating Knowledge; Knowledge & Information; Role of Human Capital in fostering a knowledge-based workforce; Human Resource Development in the 21 st Century – Enhancing Knowledge and Information Capabilities; Innovation, Technological Change and Knowledge Economy – Making New Technologies Work for Human Development, Global Initiatives to create technologies for human development.	CLO5 CLO6
IV 11 Hours	Emerging Trends and Challenges in the Knowledge Economy – Globalization and the Knowledge Economy; Knowledge Economy and Sustainable Development; Impacts of Artificial Intelligence, Automation, and Digital economy on the Knowledge Economy; Empowering People to make AI work for Human Development; Policies Priorities – What can International Institutions Do? What Should Government Do?	CLO7

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Abusslesh Sharifi (2010), India Human Development Report, Oxford.
2. Chalam, K.S(2002) Human development in South India, Anmol Pub.
3. Human development in South Asia, (2001) Mahbubul Haq Human development Center, Oxford.
4. McMahon, W. W. (2000), *Education and Development: Measuring the Social Benefits*, Oxford University Press.
5. Fukuda-Parr, S. (2019), *Human Development and the Path to Freedom: 1990–2010*, Palgrave Macmillan, London.
6. Sen, A. (1999), *Development as Freedom*, Oxford University Press.
7. Sen, A. (1992), *Inequality Reexamined*, Harvard University Press.
8. Sen, A. and Nussbaum, M. C. (Eds.) (1993), *The Quality of Life*, Oxford University Press.
9. United Nations Development Programme (UNDP) (Annual), *Human Development Report*, New York.
10. Bloom, D. E. and Canning, D. (2003), *Health and Development*, World Bank Publications, Washington, DC.
11. McMahon, W. W. (2000), *Education and Development: Measuring the Social Benefits*, Oxford University Press.
12. Comim, F., Qizilbash, M. and Alkire, S. (Eds.) (2008), *The Capability Approach: Concepts, Measures and Applications*, Cambridge University Press.
13. Planning Commission, Government of India (2002), *National Human Development Report 2001*, Oxford University Press, New Delhi.
14. Angela, S. T. U. A. R. T. (2018). The Knowledge Economy-Roberto Mangabeira Unger.
15. Brinkley, I. (2006). Defining the knowledge economy. *London: The work foundation*, 19.
16. Chandra, A., & Khanijo, M. K. (2009). *Knowledge Economy: The Indian Challenge*. SAGE Publications India Pvt Ltd.
17. Coulby, D. (2005). The knowledge economy: technology and characteristics. In *World Yearbook of Education 2005* (pp. 19-29). Routledge.
18. Dahlman, C. J., & Utz, A. (2005). *India and the knowledge economy: leveraging strengths and opportunities*. World Bank Publications.
19. Defillippi, R., Arthur, M., & Lindsay, V. (2009). *Knowledge at work: Creative collaboration in the global economy*. John Wiley & Sons.
20. Foray, D. (2004). *Economics of knowledge*. MIT press.
21. Gopal, V. B., & Krishna, S. (2012). India as a knowledge economy. *IASSI-Quarterly*, 31(2), 134-148.
22. Hadad, S. (2017). Knowledge economy: Characteristics and dimensions. *Management dynamics in the Knowledge economy*, 5(2), 203-225.
23. Holford, W. D. (2019). The future of human creative knowledge work within the digital economy. *Futures*, 105, 143-154.
24. Keller, W., & Yeaple, S. R. (2008). *Global production and trade in the knowledge economy* (No. w14626). National Bureau of Economic Research.
25. Nanjundaiah, C. (2011). Knowledge Economy: the Indian Challenge. *Journal of Social and Economic Development*, 13(2), 259-263.
26. Nguyen, T. T. (2010). *Knowledge economy and sustainable economic development: A critical review*. De Gruyter Saur.
27. Paganetto, L. (Ed.). (2017). *Knowledge economy, information technologies and growth*. Routledge.
28. Peters, M. A. (2011). Three forms of the knowledge economy: Learning, creativity and openness. In *Handbook on globalization and higher education*. Edward Elgar Publishing.
29. Powell, W. W., & Snellman, K. (2004). The knowledge economy. *Annu. Rev. Sociol.*, 30(1), 199-220.
30. Roberts, J. (2009). The global knowledge economy in question. *Critical perspectives on international business*, 5(4), 285-303.

31. Rooney, D., Hearn, G., & Ninan, A. (Eds.). (2005). *Handbook on the knowledge economy*. Edward Elgar Publishing.
32. Stiglitz, J. (1999). Public policy for a knowledge economy. *Remarks at the Department for Trade and Industry and Center for Economic Policy Research*, 27(3), 3-6.
33. Unger, R. M. (2022). *The knowledge economy*. Verso Books.
34. Human Development Report 2001, UNDP, Oxford University Press, New York.
35. Human Development Report 2025, UNDP, New York.
36. World Development Report 1998/99, The World Bank, Oxford University Press, New York.
37. Warhurst, C. (2008). The knowledge economy, skills and government labour market intervention. *Policy Studies*, 29(1), 71-86.
38. Westernen, K. I. (Ed.). (2012). *Foundations of the knowledge economy: innovation, learning and clusters*. Edward Elgar Publishing.

Course Name: Data Analysis Using Excel

Course Code: ECO.533

L	T	P	Credit
2	0	0	2

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Develop proficiency in using Excel for data analysis.
- CLO2: Understand statistical concepts and techniques.
- CLO3: Apply data analysis skills to solve real-world problems.
- CLO4: Create meaningful visualizations to communicate insights.

Units/Hours	Contents	Mapping with CLO
I 7 Hours	Foundational Excel Skills: Entering and Editing data, basic arithmetic operation, handling missing data, identifying and correcting errors, data transformation, working with tables and pivot tables.	CLO1
II 8 Hours	Statistical Analysis: Descriptive statistics – measures of central tendency, dispersion, skewness and kurtosis.	CLO2
III 8 Hours	Statistical Analysis: Inferential statistics – performing hypothesis testing, understanding confidence intervals and performing regression analysis.	CLO3
IV 7 Hours	Data Visualization: Creating Charts and Graphs: Understanding different chart types (bar, pie, line, scatter); Customizing charts and graphs; Creating dashboards and reports	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Reading:

1. George Mount (2024). *Modern Data Analytics in Excel*, Shroff Publishers & Distributors Pvt. Ltd. Mumbai
2. Manisha Nigam (2019). *Data Analysis with Excel*, BPB Publications, Pune, India

Course Name: Data Analysis Using SPSS

Course Code: ECO.534

L	T	P	Credit
2	0	0	2

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Develop proficiency in using SPSS for data analysis.
- CLO2: Understand statistical concepts and techniques.
- CLO3: Apply data analysis skills to solve real-world problems.
- CLO4: Create meaningful visualizations to communicate insights.

Units/Hours	Contents	Mapping with CLO
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I 7 Hours	Foundational Concepts and Data Management: Understanding the software interface, data types, and basic operation; Data Preparation: Learning how to import, clean, and organize data within SPSS, including data coding, variable transformations, and missing data handling.	CLO1
II 8 Hours	Statistical Analysis: Descriptive statistics – measures of central tendency, dispersion, skewness and kurtosis.	CLO2
III 8 Hours	Statistical Analysis: Inferential statistics – performing hypothesis testing, understanding confidence intervals and performing correlation and regression analysis.	CLO3
IV 7 Hours	Data Visualization: Creating Charts and Graphs: Understanding different chart types (bar, pie, line, scatter); Customizing charts and graphs; Creating dashboards and reports	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Sansanwal, D. N. (2023). Data Analysis Using SPSS, Shipra Publications, India
2. Prasad, L., & Mishra, P. (2022). Data Analysis Using SPSS, Nirali Prakashan, India

Course Name: Data Analysis Using STATA

L	T	P	Credit
2	0	0	2

Course Code: ECO.535

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Execute the data entry, extraction, merging, coding and recoding process in STATA,
- CLO2: Generate Graphs and Tables and performing statistical tests using STATA,
- CLO3: Learn the process of regression modelling and diagnostic checking using STATA,
- CLO4: Execute the process of advanced regression modelling with qualitative data using STATA.

Units/Hours	Contents	Mapping with CLO
I 07 Hours	Introduction and Data Management: Introduction to STATA; Getting familiar with the interface; Importing data from Excel; Creating a new data file (entering survey data); Data preparation and exploratory data analysis; Defining variables; Dealing with missing values; Data manipulation- data transformation; Generating and transforming variables. Basic tabs and data entry exercises; Extracting and Merging NSSO and PLFS data. Learning Activities: Brain-storming and Problem-Solving	CLO1
II 08 Hours	Descriptive Analysis of Data: Descriptive statistics for two or more variables; Creating and editing charts for two or more variables; Inferential statistics for the mean and the median; One-sample t-test; T-test and Mann-Whitney U Test; One-sample binomial test; One-sample Chi-square; Chi-Squared Test of Independence; Power Analysis for the proportion. One-way and two-way ANOVA. Generation of Graphs and Tables, and Hypothesis testing procedures. Learning Activities: Brain-storming and Problem-Solving	CLO2
III 08 Hours	Correlation and Regression Analysis: Computation of Pearson's and Spearman's rank correlation coefficient; Partial and multiple correlation coefficient; Simple Linear regression model and multiple regression models; Regression diagnostic tests: Multicollinearity; Heteroscedasticity and Autocorrelation detections and remedial measures; and detecting the presence of outliers. Estimating correlation, simple regression models and diagnostic checking using SPSS. Learning Activities: Brain-storming and Problem-Solving	CLO3

IV 07 Hours	More topics on Regression Analysis: Dummy variable (independent) regression models; Limited dependent variable regression models: Logit; and Probit models; Basic time series regression models: stationarity checking and fitting univariate and multivariate time series regression models; and Basic Panel data regression models: fixed effect and random effect models. Estimating advanced regression models using both quantitative and qualitative data using STATA.	CLO4
	Learning Activities: Brain-storming and Problem Solving	

Transaction Mode: Practical Lecture, demonstration, and hands-on practices using STATA.

Suggested Readings:

1. Colin Cameron.A, Pravin K.Trivedi (2010). Microeconometrics using Stat, Revised Version, Stata Press, 4905 Lakeway drive, College Station, Texas, USA.
2. Rabe-Hesketh, S., & Everitt, B. (2003). Handbook of statistical analyses using STATA. 4th Edition,CRC Press.
3. Long, J. S., & Freese, J. (2006). Regression models for categorical dependent variables using Stata (Vol. 7). Stata press.

Web links:

1. <https://www.stata.com/links/resources-for-learning-stata/>.
2. <https://www.stata.com/links/video-tutorials/>

Course Name: Data Analysis Using Eviews

Course Code: ECO.536

L	T	P	Credit
2	0	0	2

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Develop proficiency in using Eviews for data analysis.
- CLO2: Understand statistical concepts and techniques.
- CLO3: Apply data analysis skills to solve real-world problems.
- CLO4: Create meaningful visualizations to communicate insights.

Units/Hours	Contents	Mapping with CLO
I 7 Hours	Eviews Fundamentals: Understanding the software interface, data types, and basic operation; Data Preparation: Learning how to import, clean, and organize data within Eviews, including data coding, variable transformations, and missing data handling.	CLO1
II 8 Hours	Statistical Analysis: Descriptive statistics – measures of central tendency, dispersion, skewness and kurtosis.	CLO2
III 8 Hours	Statistical Analysis: Inferential statistics – performing hypothesis testing, understanding confidence intervals and performing correlation and regression analysis.	CLO3
IV 7 Hours	Data Visualization: Creating Charts and Graphs: Understanding different chart types (bar, pie, line, scatter); Customizing charts and graphs; Creating dashboards and reports	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Okoro, C. T. (2020). Teach Yourself Econometric Data Analysis with EViews, Projetechn, Nigeria
2. Filipek, L. (2016). Time Series Data Analysis Using EViews, Scitus Academics LLC

Course Name: Decision Making Skills

Course Code: ECO.537

L	T	P	Credit
2	0	0	2

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Describe concept and nature of decision making,
- CLO2: Discuss decision making process,
- CLO3: Apply decision making techniques in real life situation,
- CLO4: Make effective decisions in real life situation.

Units/Hours	Contents	Mapping with CLO
I 07 Hours	Introduction to decision making: Decision making, Nature of decision making, Importance of making good decisions, Relevant cases.	CLO1
II 08 Hours	Decision making process: Principles of decision-making, Steps of decision making, Relevant cases.	CLO2
III 08 Hours	Decision making techniques: Decision making techniques, making in relation to problem solving, Decision making in relation to creativity, Relevant cases.	CLO3
IV 07 Hours	Effective decision making: Problems in decision making, Developing competencies and skills required for effective decision making, Decisions regarding the career, Relevant cases.	CLO4

Transaction Mode: Presentation, lectures, case study, debates, brain-storming, simulation, role playing and direct observation, blended learning.

Suggested Readings:

1. Edwards, W., & Winterfeldt, D. von. (1986). *Decision analysis and behavioral research*. Cambridge University Press.
2. Adair, J. (2007). *Decision making and problem solving strategies*. Kogan Page Limited
3. Kalantari, B. (2010). Herbert A. Simon on making decisions: enduring insights and bounded rationality. *Journal of Management History*, 16(4), 509-520.
4. Buchanan, L. & O'Connell, A. (2006). A Brief History of Decision Making. *Harvard Business review*.
5. Akrani, G. (2011). *Importance of Decision Making in Management*. Kalyan City Life: Sharing Wisdom and Vivid Memories of Life.
6. Newell, A., & Simon, H. A. (1972). *Human problem solving* (Vol. 104, No. 9). Englewood Cliffs, NJ: Prentice-Hall.

SEMESTER-III

Course Name: Economics of Social Sector

Course Code: ECO.551

L	T	P	Credit
4	0	0	4

Course Learning Outcomes (CLO):

On completion of this course, learners will be able to:

CLO1: understand the basic concepts of social sector economics

CLO2: comprehend the importance of services and information technology

CLO3: learn about various social sectors in an economy

CLO4: analyses the dynamics of service sector growth in India

Units/Hours	Contents	Mapping with CLO
I 15 Hours	Concept of service- Attributes of service, Main types of services and their classification, service-goods relationship, economic services; Rural-Urban Services-dualism. Services Economy-Concept and its role in development. Knowledge Economy- Concept and Characteristics, Innovation and R&D.	CLO1
II 15 Hours	Services and information Technology-The Interconnection-Promotion of Services through IT in India. Financial Services-Security Markets and their Management in India- Management and Marketing of financial services in India.	CLO2
III 15 Hours	Travel, Transport, Communication, Insurance and Tourism: interrelationship – Growth of Transport-Transport Planning – Development of infrastructure-Role of the State and Private Sector. Hospitality and Entertainment Service-Hotel industry-Feasibility and Planning of Hospitality - Hotel Regulations-Tariff clarification-Food and Catering Services.	CLO3
IV 15 Hours	Dynamics of services sector growth in India, Three-sector hypothesis and India, Role of service sector in Indian Economy, Decomposition of Services sector growth in India and its implications. Employment in Services Sector- a gender perspective. Business Services, Telecommunications, Tourism, Hotel, Real estate, IT and insurance sector in India. Public Private Partnerships in Services.	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Alister Matheson & Geoffrey Walt- Tourism: economic Physical and Social Aspects.
2. A.K. Bhatia – International tourism: Fundamentals and Practices.
3. U.A. Avadani, "Investment and Security Markets in India", Himalaya Publishing House, Bombay.
4. R.K.Sen and B.Chatterjee, "Indian Economy Agenda for the 21st Century, Deep and Deep Publications, New Delhi.
5. Baumol, W.J., Blackman, S.A. Batey and Wolff, E.N. (1985). Unbalanced Growth Revisited: Asymptotic Stagnancy and New Evidence. American Economic Review 75:806-17.
6. Glasmeier, A. and Howland, M. (1994). Service-led Rural Development: Definitions, Theories and Empirical Evidence, International Regional Science Review, 16, 197-229.
7. Hindley, B. and Smith, A. (1984). Comparative Advantage and Trade in Services, World-Economy, December, 7(4), 369-89.
8. Melvin, J. R. (1989). Trade in Producer Services: A Heckscher-Ohlin Approach, Journal of Political Economy, 97(5), 1180-1196.
9. Seth, V. K. (2007). Economics of Services, Ane Books India, 2007.

Course Name: Public Economics**Course Code: ECO.552**

L	T	P	Credit
4	0	0	4

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Examine the role of Government in changing perspective,
- CLO2: Assess the efficiency of tax system in India,
- CLO3: Evaluate the annual Government budget in a country,
- CLO4: Comprehend the economic functions of government in an economy.

Units/Hours	Contents	Mapping with CLO
I 15 Hours	Role of Government in Changing Perspective: Fiscal Functions of the Government; Classification of Goods: Public Expenditure: Meaning and Classification, Theories of Public Expenditure – Maximum Social Advantage, Normative and Positive Theories, Growth in Public Expenditure, Canons of Public Expenditure, Effects of Public Expenditure on Production, Distribution and economic growth, Criteria for evaluation of public investment projects – social cost-benefit analysis.	CLO1
	Learning Activities: Brain-storming and problem solving	
II 15 Hours	Public Revenue: Sources of Revenue, Taxation – characteristics of a good taxation system, Canons of taxation, direct vs. indirect taxes, principles of taxation, effects of taxation, taxable capacity, impact and incidence of taxation; Tax structure in India and Recent Reforms - GST. Peer review of Public revenue concepts.	CLO2
	Learning Activities: Brain-storming and problem solving.	
III 15 Hours	Public Debt: Sources of Public Debt, Burden of public debt – theories, effects of public debt, methods of debt redemption, Public Debt Management in India. Public Budget - Concept of public budget, types of public budget, theories of public budgeting. peer discussion and case analysis.	CLO3
	Learning Activities: Brain-storming and problem solving.	
IV 15 Hours	Federal Finance: principles and problems of Federal finance – centre-state financial relations, 14 th Finance Commission; Fiscal Policy: meaning and objective, fiscal multipliers, compensatory fiscal policy, functional finance approach, fiscal policy for inflation, full employment and economic growth.	CLO4
	Learning Activities: Peer discussion and case analysis, brain storming and problem solving.	

Transaction Mode: Course content will be delivered using presentation, lectures, case study, debates, brain-storming, simulation, role playing, field visits and direct observation, blended learning.

Suggested Readings:

1. Backhaus, J. G. & Wagner, R. E. (2004). *Handbook of Public Finance*, Springer, US.
2. Bhatia, A. K. (2013). *Public Economics*, Wisdom Press, India.
3. Choudhary, R. K. (2014). *Public Finance and Fiscal Policy*, Kalyani Publishers, New Delhi
4. Dalton, H. (1922). *Principles of Public Finance*, Allied Publishers, Reprinted by Routledge
5. Garg, R. & Garg, S. (2017). *Handbook of GST in India*, Bloomsbury India Professional.
6. Gupta, J. R. (2011). *Public Economics in India: Theory and Practice*, Atlantic Publishers.
7. Jha, Raghendra. (2010). *Modern Theory of Public Finance*, New Age International Pvt. Ltd.
8. Musgrave, R. A. (1959). *The Theory of Public Finance*, MG-Hill Publication, New York (Available in National Digital Library for Free Download).
9. S. Singh, L. Singh and K. Vatta (2021), *COVID-19 Pandemic and Economic Development: Emerging Public Policy Lessons for Indian Punjab*, Palgrave Macmillan Publishers

Course Name: Environmental Economics and Policy**Course Code: ECO.553**

L	T	P	Credit
4	0	0	4

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Develop linkages between environment and economic development,
- CLO2: Explicate the theories of environmental economics,
- CLO3: Prepare environmental accounting,
- CLO4: Focus on global and regional environmental issues.

Units/Hours	Contents	Mapping with CLO
I 15 Hours	Environment and Development: Economics and the Environment, Evolution and Growth of Environmental Economics, Relation between Environment and Growth, Environmental Kuznets hypothesis. Learning Activities: Peer discussion and case analysis, brain-storming and problem solving	CLO1
II 15 Hours	Basic Concepts and Theories: Public Goods and Externalities, Common Property Resources, resource degradation and market efficiency. Coase theorem, social cost-benefit analysis, cost effective analysis for environment protection, Environmental Good's Demand and its Revealed Preference Methods. Learning Activities: Brain storming and case analysis, brain-storming and problem solving	CLO2
III 15 Hours	Environmental Valuation, Accounting and Management: Types of environmental values, Evolution of Environmental Accounting, Features of Integrated Environmental and Economic Accounting, Degradation of land, water resources and forests; Alternative Energy Sources and Environment. Choice Experiments Learning Activities: Understanding various concepts and their peer review, brain-storming and problem solving	CLO3
IV 15 Hours	Global and Regional Issues: Poverty, population and environment, global agreements on environment, political economy of sustainable development, Environment under WTO regime. Climate Change and the Paris Agreement, Millennium Development Goals and India, Mechanism for environment regulation in India, environmental laws and their implementation, Policy instruments for controlling pollution environmental standards, forestry policy. Water Depletion vs. Water Logging, Use of Chemicals in Agriculture and Pollution; Agroforestry as an option for Diversification in Punjab, Use of Innovative Technologies for minimizing environmental degradation. Role of Self Help Groups for Sustainable Development, Green Growth and Viksit Bharat. Learning Activities: Brain-storming and Problem Solving	CLO4

Transaction Mode: Lecture, problem solving, group discussion.

Suggested Readings:

1. Berck, P. (2015). *The Economics of the Environment*. New Delhi: Pearson India.
2. Freeman, A. (2014) *The Measurement of Environmental and Resource Values: Theory and Methods*, RFF Press.
3. Haab and McConell, (2002). *Valuing Environmental and Natural Resources: The Econometrics of Non-Market Valuation* (New Horizons in Environmental Economics), Edward Elgar .
4. Jeroen C.J.M. van den Bergh(1999), *Handbook of Environmental and Resource Economics*, Elgar online.
5. Kolstad, C.D. (2011). *Intermediate Environmental Economics*. New Delhi: Oxford University Press.

6. Kumar, Pushpam. (2009). *Economics of the Environment and Development*. New Delhi: Ane Book.
7. Muthukrishna, S. (2010). *Economics of Environment*. New Delhi: Phi learning Pvt. Ltd.
8. Maler Karl-Goran and Jeffrey R Vincent. (2003). *Handbook of Environmental Economics*. North-Holland, 2003.
9. Singh, Katar and Shishodia, Anil. (2007). *Environmental Economics: Theory and Applications*. New Delhi: Sage Publications.
10. Stavins Robert N.(2000). *Economics of the Environment: Selected Readings*. Fourth Edition. W.W. Norton and Company. 2000.

Course Name: Applied Econometrics

Course Code: ECO.554

L	T	P	Credit
1	0	1	2

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Estimate and interpret the linear regression models.
- CLO2: Diagnose the data and model for regression estimation.
- CLO3: Estimate and interpret the cross-sectional regression models
- CLO4: Estimate and interpret the time-series regression models

Units/Hours	Contents	Mapping with CLO
I 8 Hours	The Linear Regression Model: The nature and Sources of Data; An illustrative example of the determination of hourly wages; Functional Form of Regression Models with examples; Qualitative explanatory variables regression models with examples.	CLO1
II 7 Hours	Regression Diagnostics: Multicollinearity with examples; Heteroscedasticity with examples Autocorrelation with examples; Examples of Model Specification Errors.	CLO2
III 8 Hours	Regression Models with Cross-Sectional Data: The Logit and Probit Models with example; Multinomial regression models with example; Limited dependent variable regression models with examples;	CLO3
IV 7 Hours	Time Series Econometrics – Examples of stationary and non-stationary time series; examples of cointegration and error correction models; Examples of ARCH and GARCH models; Forecasting with regression models.	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Gujarati, D. (2011). *Econometrics by Example*, Palgrave Macmillan
2. Bailey, M. A. (2016). *Real Econometrics*, Oxford University Press

Course Name: Evaluation of Investment Projects

Course Code: ECO. 555

L	T	P	Credit
3	0	0	3

Course Learning Outcomes CLO): On completion of this course, learners will be able to:

- CLO1: understand the basics of investment projects and its mapping in a time scale
- CLO2: evaluate economic suitability of private sector investment projects
- CLO3: assess the economic viability of public sector investment projects
- CLO4: calculate depreciation of investment projects and make replacement decisions

Units/Hours	Contents	Mapping with CLO
I 10 Hours	Introduction: Meaning of project, Characteristics of a Project; Time Value of Money, Project Cash Flows, Cash Flow/Time Line Diagram, and Time Value Calculation; Meaning of Economic Equivalence, Principles of Economic Equivalence, Equivalence calculation involving single factor; and Equivalence calculation involving cash flows.	CLO1

II 12 Hours	Meaning Project Evaluation , Methods of Project Evaluation – Present worth, Future worth, Annual Equivalent method, Rate of Return method, Payback period method; Inflation adjusted decisions. After-tax economic evaluation – after tax cash flows, general procedure for making after-tax economic analysis, after tax comparison of projects, and capital gains/losses.	CLO2
III 11 Hours	Evaluation of Public Projects – steps in cost-benefit analysis, comparing mutually exclusive public alternatives, cost effectiveness analysis.	CLO3
IV 12 Hours	Depreciation Analysis – Meaning, depreciable assets, causes of depreciation, need for depreciation calculation, and methods of depreciation calculation. Replacement and Maintenance Analysis – Types of maintenance, types of replacement problem, determination of economic life of an asset, replacement of existing asset with a new asset – capital recovery with return, concept of challenger and defender; approaches for comparing defender and challenger; economic service life of a defender and challenger; replacement analysis under the finite and infinite planning horizons.	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Kay Poggensee and Jannis Poggensee (2022). Investment Valuation and Appraisal: Theory and Practice, Springer Cham
2. Prasanna Chandra (2017). Project: Planning, Analysis, Selection, Financing, Implementation, and Review, McGraw Hill Education.
3. Uwe Gotze, Deryl Northcott, and Peter Schuter (2015). Investment Appraisal: Methods and Models, Springer Berlin, Heidelberg.

Course Name: Economics of Education

Course Code: ECO. 556

L	T	P	Credit
3	0	0	3

Course Learning Outcomes (CLO): On completion of this course, learners will be able to:

- CLO1: To acquire knowledge and understanding of key concepts, ideas and theories related to economics and education.
- CLO2: To acquire knowledge and understanding education market, Planning and private participation.
- CLO3: To understand the education finance, issues related to quality, efficiency and equality in Indian education system.
- CLO4: To understand the issues related to higher education, vocational education and contemporary policy issues in Indian perspective.

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Introduction to Economics of Education: Effects of education on economic growth; investment in human capital; rate of return to education; capability approach to education; screening value of education; signalling value of education; health and education outcomes and their relationship; education and individual earnings and changes in it; the role of education in individual's mobility.	CLO1
	Learning Activities: Lectures, discussion, brain-storming and Problem Solving.	
II 11 Hours	Education Market and Planning: Concepts of public goods, merit goods and mixed goods; subsidization; social Choice; quality of education. Demand for educational, supply of educational; determinants of education; market failure and education sector; educational planning;	CLO2

	different modes of financing of education; Public-Private Partnership in education Sector.	
	Learning Activities: Lectures, discussion, brain-storming and Problem Solving.	
III 12 Hours	Indian Education System equality and quality: Education and socio-economic inequalities; Education Sector in India: An overview- literacy rates, school participation, school quality measures. Organization, Education for equality; Quality of Education and evaluation.	CLO3
	Learning Activities: Lectures, discussion, brain-storming and Problem Solving.	
IV 11 Hours	Higher, professional and vocational education and contemporary policy issues: Higher Education, Professional and Vocational Education: equity, access, vocational and professional education and incentives; Education loans; Unemployment and skill. Common Education System. Sarva Shiksha Abhiyan (SSA). Right to Education. National Education Policy, 2020 and knowledge economy.	CLO4
	Learning Activities: Lectures, discussion, presentation, brain-storming and Problem Solving.	

Transaction Mode: lecture, discussion, Presentation, Blended learning, Brain-storming.

Suggested Readings

1. Agarwal, Pawan(2009): Indian Higher Education Envisioning the Future, SAGE Publications Pvt. Ltd
2. Blaug, Mark (ed.) (1968) Economics of Education, Selected Readings, Volume I and II, Penguin Books.
3. Greenaway, David and Haynes, Michelle (2004) Funding Higher Education, in Johnes, G and Johnes, J (ed.) International Handbook on the Economics of Higher Education, Edward Elgar.
4. Johnes, Geraint and Johnes, Jill (ed.) (2004) International Handbook on the Economics of Education, Edward Elgar Publishing Ltd.
5. Majumdar, Tapas, (1983) Investments in Education and Social Choice, Cambridge: Cambridge University Press.
6. National Education Policy, 2020
7. Psacharopoulos, G. and Patrinos, H.A. 2005. "Human Capital and Rates of Return" in Johnes, G. and Johnes, J. (ed) International Handbook on the Economics of Education. Edward-Elgar.
8. Psacharopoulos, George (ed.) (1987) Economics of Education Research and Studies, Pergamon Press.
9. Sen, Amartya (2001) Development as Freedom, Oxford University Press.
10. Sen, Amartya, and Dreze, J., (1996) India: Economic Development and Social Opportunity, Oxford University Press.
11. Stiglitz, Joseph E. (2000). Economics of the Public Sector, W. W. Norton.
12. Stiglitz, Joseph E. and Walsh, Carl E. (2006). Economics, W. W. Norton.
13. Towards an Enlightened and Humane Society, National Education Policy 1986, A Review, (Committee for Review of National Policy and Education), New Delhi 1990.
14. Ved Prakash, (2008) Perspectives on education and development: revisiting education commission and after, National University of Educational Planning and Administration, Shipra Publications.

Course Name: Innovation and Entrepreneurship

Course Code: ECO.557

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Discuss the attitudes, values, characteristics, behaviour, and processes associated with possessing an entrepreneurial mindset and engaging in successful appropriate entrepreneurial behaviour, discuss what is meant by entrepreneurship and innovation from both a theoretical and practical perspective, and the role of the entrepreneur in the new enterprise creation process,

- CLO2: Describe the ways in which entrepreneurs perceive opportunity, manage risk, organise resources and add value,
- CLO3: Develop a plan for implementing entrepreneurial activities in a globalised and competitive environment being responsible for the social, ethical and culture issues, Critique a plan for implementing entrepreneurial activities in a globalised and competitive environment being mindful of the social, ethical and culture issues,
- CLO4: Engage in a continuing learning process through the interaction with peers in related topics, as individuals and as team members.

Units/Hours	Contents	Mapping with CLO
I 12 Hours	Entrepreneurship & Innovation: Introduction, Entrepreneurship, Entrepreneurial process, Entrepreneurial mind, Creativity and innovation, Innovation, Opportunity, Ideas, opportunities, and innovation, Relevant Cases	CLO1
	Learning Activities: Brain-storming and Problem Solving	
II 11 Hours	Entrepreneurial Style: Sole Proprietor, Partners, Joint Stock Companies, Small business, Start-ups, Ventures, Family business, social entrepreneurship, Intrapreneurship, Relevant Cases	CLO2
	Learning Activities: Brain-storming and Problem Solving	
III 11 Hours	Business Plan & Entrepreneurial Strategy: Screening opportunities, Business plan, Resource requirements, Entrepreneurial strategy, Entrepreneurial team, Entrepreneurial finance, Entrepreneurial marketing, Relevant Cases.	CLO3
	Learning Activities: Brain-storming and Problem Solving	
IV 11 Hours	Managing, Growing and Liquidating Enterprise: Enterprise management, Growth strategies, Industrial sickness, Remedial measures, Liquidation of enterprise, Relevant Cases	CLO4
	Learning Activities: Brain-storming and Problem Solving	

Note: At least one industrial visit and one business plan preparation will be mandatory before appearing in the end semester examination.

Transaction Mode: Course content will be delivered using presentation, lectures, case study, debates, brain-storming, simulation, role playing, business games and direct observation, blended learning.

Suggested Readings:

1. Timmons, Jeffrey A., Gillin, L. M., Burshtein, S., and Spinelli, Stephen Jr. (2011). *NewVenture Creation: Entrepreneurship for the 21st Century – A Pacific Rim Perspective*, 1st Edition. McGraw-Hill Irwin.
2. Bessant, J. (2003). *High Involvement Innovation: Building and Sustaining Competitive Advantage Through Continuous Change*. Chicester: John Wiley & Sons.
3. Bygrave, W and Zaccarakis, A. (2013). *Entrepreneurship*, 3rd Edition, John Wiley and Co.
4. Drucker, P. (1999). *Innovation and Entrepreneurship*, Butterworth Heinemann, Oxford.
5. Fagerberg, J, Mowery, DC and Nelson, RR. (2005). *The Oxford Handbook of Innovation*, Oxford University Press, NY.
6. Hisrich, R.D., Peters, M.P., and Shepherd, D. (2013). *Entrepreneurship*, McGraw-Hill Irwin, Boston.
7. Kuratko, D. (2013). *Entrepreneurship: Theory, Process, and Practice*, 9th Edition, Wiley online library.
8. Moore, Geoffrey. (1999). *Crossing the Chasm*, Harper & Collins.
9. Porter, ME, *Competitive Advantage: Creating and Sustaining Superior Performance*, Free Press, New York, NY, 1985.

Journals for Reference

1. Journal of Business Venturing
2. Entrepreneurship Theory and Practice
3. Journal of Small Business Management
4. Academy of Management Review

5. Journal of Small Business and Entrepreneurship
6. Venture Capital
7. Small Business Economics
8. Family Business review

Web links

1. www.brikenbulbs.com
2. www.en.wikipedia.org/wiki/business.plan
3. www.brainstorming.co.uk
4. www.mind-mapping.co.uk
5. www.mckinsey.com/
6. www.ideo.com
7. www.wdc-econdev.com

Course Name: Social Survey Methods

Course Code: ECO.558

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: Explain the various concepts and approaches used in social survey,
- CLO2: Identify the various survey techniques used in social sciences,
- CLO3: Distinguish the various sampling techniques,
- CLO4: Analyze the social survey data.

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Introduction to Surveys and types of social research methods: research methods for community needs, in depth interviews, group discussions etc. Advantages and limitations of social survey methods.	CLO1
II 11 Hours	Social Surveys: An Introduction to Structured Questionnaires and Structured Interviews, Survey error.	CLO2
III 12 Hours	Sample Design: choosing target population and sample size, selection of appropriate sampling technique.	CLO3
IV 11 Hours	Analysis of Surveyed Data: coding and preparing data tables, calculation and presentation with excel, various case studies of Social Surveys.	CLO4

Transaction Mode: Lecture, case study, discussion, field visits and demonstration, blended learning.

Suggested Readings:

1. Becker, Howie and Pamela Richards. 1986. *Writing for Social Scientists: How to Start and Finish your Thesis, Book or Article*. University of Chicago Press.
2. Dillman, D., Eltinge, J., Groves, R., & Little, R. (2002). *Survey nonresponse indeign, data collection, and analysis*. In Survey Nonresponse, R. Groves, D. Dillman, J. Eltinge, & R. Little. New York: John Wiley & Sons.
3. Fowler, F. (1995). *Improving survey questions: design and evaluation*. Thousand Oaks, CA: SAGE Publications. (Chapter 3, 46-77)
4. Fowler, F. (1995). *Improving survey questions: design and evaluation*. Thousand Oaks, CA: SAGE Publications. (Chapter 3, 46-77).
5. Gorin, J. (2006). *Test design with cognition in mind*. Educational Measurement: Issues & Practice, 25(4), 21-35.
6. Groves, R. M et al. (2009). *Survey methodology*. 2nd Edition, Wiley. (Chapters 1-2)
7. Groves, R. M., Fowler, F. J., Couper, M. P., Lepkowski, J. M., Singer, E., & Tourangeau, 4. R. (2004). *Survey methodology. that work*. Hoboken, NJ: Wiley.
8. Groves, Robert M. (1989). *Survey Errors and Survey Costs*. New York: John Wiley and Sons
9. Gupta, S. C. (2012). *Fundamentals of Statistics*. New Delhi: Himalaya Publishing House Pvt. Ltd.
10. Lavrakas, P. J. (1993). *Telephone Survey Methods: Sampling, Selection, andSupervision*. Thousand Oaks, CA: Sage Publications.

11. Oppenheim, A. N. (1992). *Questionnaire design, interviewing and attitude measurement*. 9. London: Pinter. (Chapters 10-11, 174-209). Patton, M. (1980) *Qualitative Interviewing*.
12. *Qualitative Evaluation Methods*. Thousand Oaks, CA: SAGE Publications. 195-263.
13. Sapsforf, R. (1999) *Survey Research*. Thousand Oaks, CA: Sage Publications. 20-99.
14. Singleton, R. A., & Straits, B. C. (2005). *Approaches to social research* (4th edition). New York: Oxford University Press.

Course Name: Economics of Infrastructure

Course Code: ECO.559

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: To acquire knowledge and understanding of key concepts, ideas and theories related to infrastructure and Economic development.
- CLO2: To acquire knowledge and understanding infrastructure financing, transport Telecommunication and Energy Infrastructure.
- CLO3: To understand the Irrigation, Banking and Financial Services, Education and Health infrastructure related concept
- CLO4: To understand the progress in infrastructure and contemporary policy issues in Indian perspective.

Units/Hours	Contents	Mapping with CLO
I 11 Hours	<p>Infrastructure and Economic Development: –Infrastructure-Development Linkages; Infrastructure as a public good; Physical & Social Infrastructure; Special characteristics of public utilities; The peak-load, off -Load Problem, Economies of scale of joint supply; marginal cost pricing vs. other methods of pricing in public utilities; cross – subsidization – free prices, equity and efficiency.</p> <p>Learning Activities: Lectures, discussion, brain-storming and Problem Solving.</p>	CLO1
II 12 Hours	<p>Infrastructure Financing: Private vs. Public Sector Financing; privatization of infrastructure- capital market reforms, project financing, resource mobilization. Transportation: Modes, problems and importance of transport system; Demand for transport. Cost functions in the transport sector, Principles of pricing. Special problems of individual modes of transport; Telecommunication: Tele-density, Mobile and Internet, Social Media, rate making in telephone utilities. Digital Infrastructure. Energy: Generation, Distribution and Pricing, Alternative (Renewable and Unconventional) Sources of Energy, Energy Crisis in India.</p> <p>Learning Activities: Lectures, discussion, brain-storming and Problem Solving.</p>	CLO2
III 12 Hours	<p>Irrigation: Sources, distribution (disparity), efficiency in use, user charges. Banking and Financial Services: Spread and Performance of Banking Services, technology Interface of Financial Services; Financial Inclusion, reforms in banking system. Education: rate of return approach, capability approach, education financing, education planning, quality education. Health: Demand and supply of health care; financing of health care, Health Inequalities, Drinking Water and Sanitation.</p> <p>Learning Activities: Lectures, discussion, brain-storming and Problem Solving.</p>	CLO3
IV 10 Hours	<p>Policies and Performance analysis: Development of economic and social infrastructure since independence in India, PPP initiatives, National Education Policy, 2022. JAM Trinity, Jal Jeevan Mission, PMJAY, National Infrastructure Pipeline, PM GatiShakt.</p>	CLO4

	Learning Activities: Lectures, discussion, brain-storming and Problem Solving.	
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Transaction Mode: lecture, discussion, Presentation, Blended learning, Brain-storming.

Suggested Readings:

1. A Kapil (2010), Infrastructure And Economic Development, Deep & Deep Publications Pvt. Ltd
2. B.Jayarama Bhat, (ed.) (2008), Infrastructure Development in India, Published by the Author, Dos in Economics, Kuvempu University, Shankaraghatt-577 451, Shivamogga District
3. Cockburn, J.M., Dissou, Y., Duclos, J.-Y., Tiberti, L. (Eds.) (2013) Infrastructure and Economic Growth in Asia, Springer International Publishing
4. Dash, L.N (2007), Economics of Infrastructure: Growth and Development, Regal Publications
5. Dev, Mahendra .S (2018), India Development Reprot 2017, Oxford University Press, New Delhi
6. Menberu Teshome (2010), Infrastructure and Development, VDM. Verlag
7. Pratap, Kumar V., Chakrabarti, Rajesh (2017) Public-Private Partnerships in Infrastructure Managing the Challenges, Springer International Publishing.
8. Raghuram G & Rich J: Infrastructure Development and Financing (Mac Millan, New Delhi, 1999) · Turvey, R. (Ed.) (1968), Public Enterprises, Penguin, Harmondwoth.
9. Tilak, J.B.G. (1994), Education for Development in Asia, Sage Publications, New Delhi

Course Name: Labour Economics

Course Code: ECO.560

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

CLO1: understand the basics of labour economics

CLO2: comprehend the methods and approaches of wage determination

CLO3: accrue knowledge on the impact of wages on industrial relations

CLO4: learn the relationship between wages and labour migration

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Introduction To Labour Economics: Definition, Significance and Peculiarities of Labour, Nature, Scope and Importance of Labour Economics, Characteristics of Indian Labour Market, Labour Market policies, Mobility of labour	CLO1
II 12 Hours	Wage Determination: Marginal Productivity Theory, Theory of Collective Bargaining, Modern Theory of Wages. Minimum Wage and Fair Wage, Wage Determination in – Organised- Unorganised Sector, Evolution and Features of Wage Policy in India	CLO2
III 11 Hours	Industrial Relations: Labour Unions in India- Growth, Pattern, Structure and Achievements of Labour Union in India, Causes of Industrial Disputes and their settlement and preventive mechanism, Current trends in Collective Bargaining, Social Security Measure	CLO3
IV 11 Hours	Migration And Labour Market Reforms: Approaches to Labour Migration trends and effects of Migration, Child Labour Policy in India, Problems and Policy of Female Workers in India, Labour Relations in India, ILO:- Establishment of ILO, Aims and objectives of ILO.	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Datt, G. (1996), Bargaining Power Wages and Employment: An Analysis of Agricultural Labour Markets in India, Sage Publications, New Delhi.
2. Hajela, P.D. (1998), Labour Restructuring in India: A Critique of the New Economic Policies, Common Wealth Publishers, New Delhi.
3. Lester, R.A. (1964), Economics of Labour 92nd Edition), Macmikllan, New York.
4. McConnell, C. R. and S. L. Brue (1986), Contemporary Labour Economics, McGraw hill, NY.
5. Papola, T.S., P. P. Ghosh and A. N. Sharma (Eds) (1993), Labour Employment and

Industrial Relations in India, B.R Publishing Corporation., New Delhi.

6. H.B.and T.N.srinivasan (Eds), The Handbook of Development Economics, North Holland, NY.

7. Venkata Ratnam C.S. (2001), Globalisation and Labour Management Relations, Dynamics of Change, Sage Publications, Response Books, New Delhi.

Course Name: Economics of Information Technology

Course Code: ECO.561

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

CLO1: understand the basics of information economy

CLO2: comprehend the role of information technology in an economy

CLO3: learn the role of information technology in labour employment

CLO4: assess the role of information technology in the global economy

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Definition of information-industry Value Chain Knowledge Economy-information of Economy-information Economy. Nature and Scope of information Technology-Variou Sources of information.	CLO1
II 12 Hours	The Role of Mass Media, The Tele Communications industry-Origins, The Computer industry – Origins of hardware and software. The Broadcast industry, Cable and Satellite Television. Theory of public good, information as a public good, Role of Government in information and the Media-Broadcast and Cable Television, Telecommunications.	CLO2
III 11 Hours	Information Technology-Labour and Employment-Globalization; Effect on Productivity-Contingent labour-part time employment – impact on Older persons, Gender issues-Human Resource Development.	CLO3
IV 11 Hours	Information Technology and the Media in the Global Economy-Global information infrastructure – Relationship between Trade and infrastructure-The General agreement on Trade and Services – WTO basic Telecommunication agreement – WTO information Technology agreement-Trade related intellectual property rights. Issues in Media and information Economics – Gap between developed and developing Nations-Piracy-The legal and regulatory environment –The role of the government-information.	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Linda low, Economics of Information Technology and the Media, World Scientific Singapore University Press, National University of Singapore, Singapore, 2000.

2. Hal R. Varian, Joseph Farrell, & Carl Shapiro: The Economics of Information Technology: An Introduction, Cambridge University Press.

3. David Ulph and Nir Vulkan. Electronic commerce and competitive first-degree price discrimination. Technical report, University College, London, 2000.

4. Thomas N. Hubbard. The demand for monitoring technologies. Quarterly Journal of Economics, pages 533–560, May 2000.

Course Name: World Economy

Course Code: ECO.562

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

CLO1: understand the basics of world economy

CLO2: comprehend the role of demography in the world economy

CLO3: learn the role of agriculture and industry in the world economy

CLO4: assess the dynamics of trade in the world economy

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Introduction To World Economy: An overview of the world economy; Major economies of the world, Income and Income Growth of World Economy during the last two decades. Linkages in the Major Economies- Trade, Investment and Capital Flows, Major Economic Groups.	CLO1
II 12 Hours	World Economy: The Demographic Dimension: Recent Trends in world population, Birth Rate, Death Rate, Infant Mortality Rate, Child Mortality Rate, Total Fertility Rate, Life. Expectancy at birth in US, UK, Germany, France, Japan, China, India, Sri Lanka, Australia and Bangladesh.	CLO2
III 11 Hours	Agriculture And Industry In The World Economy: Main food producers of the world; Trends in the production of main food crops; World food Security. Main Industrial Economies of the World; Role of industrial development in the growth of major world economies.	CLO3
IV 11 Hours	World Trading System: Trends in the international trade; Main trading nations of the world. Role of international trade in the growth and development of Major World Economies. Emergence of WTO. Role of WTO in World Economy. International Monetary Fund, World Bank Global Financial Crisis and its impact on World Economy.	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. World Bank, World Development Report, Oxford. Various Issues.
2. Human Development Report, UNDP, Various issues.
3. Trade and Development Report, UNCTAD, Various issues.
4. Rosser J. B. and Rosser M.V. (2005): Comparative Economics in a Transforming World Economy, Prentice Hall.
5. Daniels J. P and David D. V (2011): Global Economic Issues and Policies, Routledge, New York.
6. Yarbrough B.V and Yarbrough R.M (2007): The World Economy, Trade and Finance, Cengage Learning.
7. Thirlwall, A.P(1999): Growth and Development, Macmillan, London,
8. Salvatore, D. (1997), International Economics, Prentice Hall, Upper Saddle, NJJ. New York.

Course Name: Budgetary Theory and Practice

Course Code: ECO.563

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: distinguish between the government and the market
- CLO2: comprehend the role of government spending activities
- CLO3: learn the principles of government revenues
- CLO4: assess the important of inter-governmental grants in theory and practice

Units/Hours	Contents	Mapping with CLO
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I 11 Hours	Government And The Market: Government in a Market System: Government and the Market, Production, Provision and Privatization, Efficiency and inefficiency in the Public Sector; The Structure of the Governments: Organizing Public service Delivery, Designing a Federal Structure, The State-Local Relationship, and Evolution of Fiscal Federalism in India; Federal Government Revenue and Spending, State and Local Revenue and Expenditures, How big should Government Be? What makes Government Grow?; Constraining the Growth of Government.	CLO1
II 12 Hours	Government Spending: Budgeting in the Public Sector: Budgeting Process, Revenue Forecasting, Off-Budget and On-Budget Funds; Budgeting Expenditures; Zero-based Budgeting; Budgeting and Public Choice: Balanced budgets, Deficits and Debts; Cost-Benefit Analysis- The Decision Rule, Kinds of Cost-Benefit Analysis, Present Value and Cost-Benefit Analysis, Choosing a discount rate, Capital Spending and Public Sector Borrowing; Efficiency Issues: Why Public Capital?; Equity Issues: Financing Infrastructure, Transportation Infrastructure.	CLO2
III 11 Hours	Government Taxes, Fees And Grants: Principles of Taxation: Efficiency issues in Tax Design, Equity Issues in Tax Design; Practical Problems in Tax Design: Criteria for Tax/Revenue System Design Tax Expenditures, Interstate Tax Issues, Taxation in Global Economy; Fees and Charges as a Revenue Source: Fees or Taxes?, Types of Fees and Charges, Equity issues in Fees and Charges, Fees and Charges as Growth management tools.	CLO3
IV 11 Hours	Inter-Governmental Grants In Theory And Practice: Growth and Decline of Federal Grants: Purposes of Grants, Correcting Spatial Externalities, Redirecting Priorities; Types of Grants: General Purpose or Categorical. Formula or Project. Lump sum or Matching?; Open ended or Closed Ended?, Matching Grants; Efficiency and Equity Effects of Grants: Indifference Analysis of Grants, Lump sum Grants, Fungibility and Maintenance of Effort Flypaper Effect.	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Buiter, W.H. (1990): Principles of Budget and Fiscal Policy, MIT Press.
2. David N. Hyman (2007): Public Finance: A Contemporary Application of Theory to Policy, Thomson Asia Pvt. Ltd., Singapore.
3. Davie, B.F. and Duncombe, B.F. (1970): Public Finance, Holt. Rineha and Winstreet, NY.
4. Hyman, David N. (1983): Public Finance: A Contemporary Application of Theory to Policy, The Dryden Press, NY.
5. Jha, Raghendra (1987): Modern Theory of Public Finance, Wiley Eastern, Delhi.
6. Mishra, B. (2006): Economics of Taxation: Theory and Application, Akansha Publishing House.
7. Musgrave, R.A. (1959): The Theory of Public Finance, Tata McGraw Hill, ND.
8. Bhargava, P.K. (1982): Centre State Resource Transfers in India, Academic Press, Gurgaon.
9. Borkar, V.V. (1971): Income Tax Reform in India, Popular Prakashan, Bombay.
10. Chelliah, R.J. (ed.) (1997): Towards Sustainable Growth, OUP, ND.

Course Name: Energy Economics and Policy

Course Code: ECO.564

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

CLO1: understand the underlying issues and challenges of energy economy

CLO2: comprehend the underlying theories of energy economy

CLO3: learn the dynamics of energy market

CLO4: assess the important of sustainable energy economy in theory and practice

Units/Hours	Contents	Mapping with CLO
I 11 Hours	History of energy use; Present status of energy world, Major types of energy resources; Energy forecasting; Trends and challenges in global energy and climate policy, population and energy, energy intensity, energy crisis and alternate sources of energy.	CLO1
II 12 Hours	Theoretical background: Derived energy demand, Consumer demand, Producer demand, energy demand forecasting, Issues treated by demand models, energy taxation; The exploration, field development, production, depletion dimension, optimum supply of energy, market price over time, role of market, economies of electricity supply, and renewable energy supply.	CLO2
III 11 Hours	Structure of energy markets, Cartel model, market failures, energy pricing, International oil market, Game theory and energy market, India's Fuel Pricing Policies; Basic pricing model, Tradability of energy products, energy taxes and subsidies;	CLO3
IV 11 Hours	Link between energy access and poverty, valuing externalities, global climate change, policy initiatives, models of resource environment interaction; Economic theory of renewable energy supply, Economics of solar, wind, Hydro and bio-fuels, Economics of oil refining, Economics of power generation; Defining Sustainability, sustainable energy consumption, Concept of green accounting, Low carbon options, Paris climate accord.	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings

1. Agarwal, M.C. and Monga, J.R. - Economic and Commercial Geography, (National Publishing House, New Delhi, 1992).
2. Common, M. - Environmental and Resource Economics (Longman, London, 1996)
3. Hemalatha Rao - Rural Energy Crises: A Diagnostic Analysis (Ashish Publishing House, New Delhi, 1990).
4. Kneese. A.V and Sweeny, J.L, Handbook of Natural Resource and Energy Economics (North Holland, 1993).
5. Muna singhe, M and Meier, P - Energy Policy and Modeling (Cambridge University Press, UK, 1993).
6. Paul Stevens (Ed) - The Economics of Energy, Vol. I and II (Edward Elgar 2000).
7. Raikhy, P. S. and Parminder Singh., Energy Consumption in India - pattern and Determinants (Deep and Deep, New Delhi, 1990).
8. Sankar U, Public Sector Pricing: Theory and Applications (IEA Trust for Research and Development, 1992)
9. TERI - Teri Energy Data Directory and Year Book 2005-06 (The Energy Research Institute, 2005).
10. William Burch (Ed.) - Readings in Ecology, Energy and Human Society: Contemporary Perspectives (Harper and Row, New York, 1997).
11. Bhattacharyya, Subhes. C. (2011). Energy Economics: Concepts, Issues, Markets and Governance. Springer. London, UK. (Selected chapters)
12. Stevens, P. (2000). An Introduction to Energy Economics. In Stevens, P.(ed.) The Economics of Energy, Vol.1, Edward Elgar, Cheltenham, UK.
13. J.M. Griffin, and H.B. Steele, Energy Economics and Policy, Academic Press, 1985
14. Carol A. Dahl, International Energy Markets: Understanding Pricing, Policies, and Profits, Tulsa: Pennwell, 2015 (second edition)
15. Hunt, Lester C., and Joanne Evans, eds. International handbook on the economics of energy. Edward Elgar Publishing, 2011 (EEP)

Course Name: Poverty and Income Distribution**Course Code: ECO.565**

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: understand basics of poverty and income distribution
 CLO2: comprehend the dynamics of poverty and income distribution in India
 CLO3: learn the principles of policies of poverty alleviation.
 CLO4: assess the measurement-dynamics of poverty and inequality in India

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Development, meaning; dimensions and paths: ideologies of poverty and income distribution. International aspects of poverty and income distribution, Development and inequality-income distribution and development-Kuznets curve.	CLO1
II 12 Hours	Poverty and income distribution in the Indian context historical perspective- Colonialism, Families and Drain Theory-Trends in Poverty and income Distributions- Temporal and Spatial-during the era of Planning.	CLO2
III 11 Hours	Income distribution and poverty alleviation policies macro and micro instruments. Employment generation and wages; Human capital formation, Social service, Asset distribution, Taxation subsidies - Target growth approach-Basic needs approach.	CLO3
IV 11 Hours	Conceptual frame, poverty and income distribution, Poverty and deprivation; Kinds of poverty indicators, Culture of poverty and perspectives. Concepts of inequality-social, Political and others-inter and intra generational aspects of income distribution. Measurement of poverty and inequality – Poverty line, its composition and construction – indices of poverty, head count ratio. Poverty gap Squared Poverty Gap- Sen's index, Human Development index, Human poverty income, Limitations-Trends in Rural and Urban, Poverty in India-Criteria for inequality Measurement – Complete Measures of inequality.	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Dudley Jackson: Poverty, Macmillan Studies, Macmillan Press 1972.
2. Yuso Hayami: Understanding Village Community and the Direction of Agricultural Change in Asia, Hindustan Pub. Corp. 1981.
3. Michael P. Todaro, Economics Development (Addison-Wesley), 2000.
4. A. K. Sen: On Economic inequality, Oxford Press.
5. William Loehr (Ed): Economic Development, Poverty and Income distribution, West View Press, Colorado
6. Paul Streeten, et. al., First Things First: Meeting Basic Human Needs in Developing Countries, Oxford University Press, 1981.
7. M.L. Dantwala, Poverty in India, Then and Now, 1870-1970.
8. Dandekar and Rath: Poverty in India (1971)
9. Deb Raj Ray: Development Economics (Oxford University press), 1998.
10. S. Subrahmanian (Ed): Measurement of inequality and Poverty, Oxford University Press, 1997.
11. T.L. Jain: Poverty in India, ESS. Publications, 1987.

Course Name: Regional Economic Integration**Course Code: ECO.566**

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

- CLO1: understand the concept, theories, and types of regional economic integration
- CLO2: explore major regional integration efforts
- CLO3: analyse the economic, political, and social impacts of regional economic integration
- CLO4: evaluate case studies of success and failure in regional integration

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Stages of Regional Integration, Viner's Theory: Trade Creation and Trade Diversion, Multilateralism and Regionalism	CLO1
II 12 Hours	European Union, History, institutions, and policies, Brexit and its implications, North American Free Trade Agreement (NAFTA), ASEAN and Asia-Pacific Integration, South-South Integration	CLO2
III 11 Hours	Recent Regional Blocs: TPP, RCEP; SAARC and African Union, Gulf Cooperation Council (GCC)	CLO3
IV 11 Hours	Globalization vs. Regionalism: Complementary or contradictory? Multilateralism and the WTO, Regional Integration's Impact on small economies and inequality, investment flows, Trump 2.0 and Regional Integration	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Balassa, B. (1961). *The Theory of Economic Integration*. — A foundational text that defines the stages of economic integration (FTA, customs union, etc.). Publisher: Allen & Unwin.
2. Winters, L. A. (1996). *Regionalism versus Multilateralism*.
3. Winters, L. A. (1996). Discusses the theoretical and empirical debate over regional trade agreements vs. global trade. *World Bank Policy Research Working Paper No. 1687*.
4. Lawrence, R. Z. (1996). *Regionalism, Multilateralism, and Deeper Integration*. Washington, D.C.: Brookings Institution Press.
5. Ethier, W. J. (1998). "The New Regionalism". *The Economic Journal*, 108(449), 1149–1161.
6. Ethier, W. J. (1998). — Explores the rise of new forms of regional trade agreements in the 1990s.
7. Schiff, M., & Winters, L. A. (2003). *Regional Integration and Development*. Oxford University Press / World Bank.
8. Schiff, M., & Winters, L. A. (2003). A practical and policy-oriented approach to regional integration, especially in developing countries.
9. Mattli, W. (1999). *The Logic of Regional Integration: Europe and Beyond*. Cambridge University Press.
10. Mattli, W. (1999). Focuses on the conditions that lead to successful regional integration

SEMESTER - IV

Course Name: Applied Microeconomics

Course Code: MECO.580

Course Learning Outcomes: On completion of this course, learners will be able to:

L	T	P	Credit
4	0	0	4

CLO1: apply the consumption theories in practice

CLO2: apply the demand theories in practice

CLO3: estimate demand function for India

CLO4: apply production and cost function in practice

Units/Hours	Contents	Mapping with CLO
I 15 Hours	Consumer Demand Theory, Specification and Demand Theories-Preference and Utility Maximization, Duality and Consumer Demand, Restrictions in Consumer Demand, Static Versus Dynamic Demand Relation: Distributed Lag Demand Function, Nerlove's stock adjustment Principle, Short run and Long run demand function, Houthakker and Taylor's habit formation principle, The Cobb Douglas & Constant Elasticity of Demand Function, Nested CES Utility Function.	CLO1
II 15 Hours	Partial & Complete Demand System -Partial Demand System: Empirical Content (numerical estimates) to Various Partial Demand System – Engel Expenditure Model: marginal propensities to consume and income elasticities of demand, Estimates of various Engel Functions, Engel Expenditure Elasticities using Cross-section Data; Comparing Linear versus Log –Log Demand function, Consumption Expenditure Function: Estimation of MPC and Elasticity of Consumption Expenditure with respect to Level of Income using Time-series Data.	CLO2
III 15 Hours	Complete Demand System: Demand Function for Commodities –LES Demand, AIDS Model – Linear and Quadratic, Own Price, Cross Price and Income Elasticities of Demand. Application: Estimation of Demand function for India, Some studies using the above models.	CLO3
IV 15 Hours	Production Function & Cost Function Estimation-Production functions: Duality: Profit Maximization & Cost minimization, Estimation of Factor Demand, Cobb-Douglas, Leontief, CES, VES, Transcendental, Translog Production Function and Its Properties; Efficiency and Total Factor Productivity. Derivation of Cost Function from Production Function, Empirical Cost Studies – Polynomial Cost Function: Linear, Quadratic and Cubic Cost Functions. Application: Estimation of Production & cost function & TFP, Some studies using the above models, Methods of measuring efficiency: Parametric and non-parametric.	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Deaton, A. (1992). *Understanding consumption*. Oxford University Press.
2. Deaton, A., & Muellbauer, J. (1980). *Economics and consumer behavior* Cambridge university press.
3. Deaton and Muellbauer. (1980). *An Almost Ideal Demand System*. American Economic Review 70 (3): 312-326.
4. Banks, Blundell and Lewbel. (1997). *Quadratic Engel Curves and Consumer Demand*. Review of Economics and Statistics 79(4): 527-539. (4): 527-539.
5. Deaton and Muellbauer. (1980). *An Almost Ideal Demand System*. American Economic Review 70 (3): 312-326.

6. Banks, Blundell and Lewbel. (1997). *Quadratic Engel Curves and Consumer Demand*. Review of Economics and Statistics 79(4): 527-539. (4): 527-539.
7. Pollak, R. A., & Wales, T. J. (1992). *Demand system specification and estimation*. Oxford University Press on Demand
8. Barnett, W. A., & Serletis, A. (2008). *Consumer preferences and demand systems*. Journal of Econometrics, 147(2), 210-224.
9. Haque, M. O. (2006). *Income elasticity and economic development: Methods and applications* (Vol. 42). Springer Science & Business Media.
10. Phlips, L. (2014). *Applied consumption analysis: advanced textbooks in economics*. Elsevier.
11. Heathfield, D. F. (2016). *An introduction to cost and production functions*. Macmillan International Higher Education.
12. Stone, R. (1954). *Linear expenditure systems and demand analysis: an application to the pattern of British demand*. The Economic Journal, 64(255), 511-52.
13. Krishna, K. L. (Ed.). (1997). *Econometric Applications in India*. Oxford university press.
14. Radhakrishnan, R (2019). *Essay on the Econometrics of Consumer behavior*, Academic Foundation
15. Edgerton, D. L., Assarsson, B., Hummelmoose, A., Laurila, I. P., Rickertsen, K., & Vale, P. H. (1996). *The econometrics of demand systems: with applications to food demand in the Nordic countries* (Vol. 34). Springer Science & Business Media.
16. Cameron, A. C., & Trivedi, P. K. (2005). *Microeconometrics: methods and applications*. Cambridge university press.
17. Keller, W. J. (1976). *A nested CES-type utility function and its demand and price-index functions*. European Economic Review, 7(2), 175-186.

Course Name: Applied Macroeconomics

Course Code: MECO.581

L	T	P	Credit
4	0	0	4

Course Learning Outcomes: On completion of this course, learners will be able to:

CLO1: estimate national income for a country like India

CLO2: estimate aggregate demand function

CLO3: comprehend the dynamics of money and inflation relationship

CLO4: suggest macroeconomic models appropriate for policy making in India

Units/Hours	Contents	Mapping with CLO
I 15 Hours	Growth and Regional: Disparities: National Income: Method of Splicing a time series data, Non stationarity & Stationarity, Identification of Structural Breaks –Exogeneity & Endogeneity, Different test: Chow, Zivot- Andrew, Bai-perron Computation of Growth Rates – CAGR, Annual Average. Empirical Measurement of Regional Disparity – Sigma & Beta Convergence Analysis, Discussion on Literatures on Growth & Regional Disparities on India.	CLO1
II 15 Hours	Aggregate Demand Estimation: Consumption Function- Estimation of Consumption Function-Absolute Income, Life Cycle and Permanent Income Hypotheses, Investment: Estimation of Investment Function, Accelerator & Distributed Lag Models, Neoclassical Models, Endogeneity and Dynamic Models. Empirical Estimation of Demand Function for and Supply Function of Exports.	CLO2
III 15 Hours	Money and Inflation Dynamics: Demand Function for Money-Short-run and long-run demand functions for money; Inflation targeting and Sacrifice Ratio, Estimation of Philips curve, Supply Response Function- estimates of linear, log-linear and short-run and long run price elasticities.	CLO3

IV 15 Hours	Macro Econometrics Models for India: Evolution of Macro-econometric models for India, Estimating Macro-econometrics Models for Indian Economy, Structural Equation Models, Estimation of Interaction of different markets, Policy Simulation.	CLO4
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Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Flaschel, P., Groh, G., Proaño, C., & Semmler, W. (2008). *Topics in applied macrodynamic theory* (Vol. 10). Springer Science & Business Media.
2. Hoover, K. D. (2011). *Applied intermediate macroeconomics*. Cambridge University Press.
3. Heijman, W. J. M. (2000). *Applied Macroeconomics*. Cereales.
4. Acemoglu, D. (2012). Introduction to economic growth. *Journal of economic theory*, 147(2), 545-550.
5. Mills, T., & Patterson, K. (Eds.). (2009). *Palgrave Handbook of Econometrics: Volume 2: Applied Econometrics* (Vol. 2). Springer.
6. Bårdsen, G., Jansen, E. S., Eitrheim, Ø., & Nymoen, R. (2005). *The econometrics of macroeconomic modelling*. OUP Oxford.
7. Balakrishnan, P. (2010). *Economic growth in India: History and prospect*. Oxford University Press.
8. Das, P. (2007). Economic growth and structural break in India: Testing unit root hypothesis. *The Journal of income and wealth*, 29(2), 29-43.
9. DeLong, J. B. (2003). India since independence: An analytic growth narrative. *In search of prosperity: Analytic narratives on economic growth*, 184-204.
10. Cherodian, R., & Thirlwall, A. P. (2015). Regional disparities in per capita income in India: convergence or divergence? *Journal of Post Keynesian Economics*, 37(3), 384-407.
11. Bakshi, S., Chawla, A., & Shah, M. (2015). Regional disparities in India: A moving frontier. *Economic and Political Weekly*, 44-52.
12. Ghosh, M. (2013). *Liberalization, growth and regional disparities in India*. Springer Science & Business Media.
13. Krishnamurthy, K. 2002. Macro-econometric models for India: Past, present and prospects. *Economic and Political Weekly* 37(42): 4295-4308.
14. Yoshino, N., Paramanik, R. N., & Gopakumar, K. U. (2020). An Aggregate-Level Macro Model for the Indian Economy.
15. Rangarajan, C., & Arif, R. R. (1990). Money, output and prices: A macro econometric model. *Economic and Political Weekly*, 837-852.
16. Jadhav, N., & Singh, B. (1990). Fiscal-Monetary Dynamic Nexus in India: An Econometric Model. *Economic and Political Weekly*, 159-165.
17. Bodkin, R. G., Klein, L. R., & Marwah, K. (1991). A history of macro-econometric model-building. *Books*.
18. Diebold, F. X. (1998). The past, present, and future of macroeconomic forecasting. *Journal of Economic Perspectives* 12(2), 175-192.
19. Krishna, K. L., Krishnamurty, K., Pandit, V., & Sharma, P. D. (1991). Macro-econometric modelling in India: a selective review of recent research. *Econometric Modelling and Forecasting in Asia*.
20. Krishnamurty, K., & Pandit, V. (1984). Macro-econometric Modelling of the Indian Economy: An Overview. *Indian Economic Review*, 19(1), 1-15.
21. Pandit, V., & Bhattacharya, B. B. (1987). Resource Mobilization, Growth, and Inflation: A Trade-Off Analysis for India. *Asia pacific Economies: Promises and Challenges, Research in International Business and Management*, 6(Part A).
22. Padoan, P. C. 1990). Macro-econometric Modelling of the Indian Economy. *Studies on Inflation and Growth*.
23. Boumans, M., & Duarte, P. G. (2019). The History of Macro-econometric Modelling An Introduction. *History of Political Economy*, 51(3), 391-400.

Course Name: Time Series Econometrics**Course Code: MECO.582**

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

CLO1: construct and estimate linear regression models using time series data

CLO2: construct and estimate time series models for stationary processes

CLO3: construct and estimate time series models for non-stationary processes

CLO4: construct and estimate advance time series models

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Linear Regression Models Using Time Series Data: Regression models with strictly exogenous regressors, Regression models with predetermined regressors, Regression models with endogenous regressors.	CLO1
II 12 Hours	Time Series Models For Stationary Processes: Difference equations, Univariate ARMA models, Estimation of ARMA models, Vector auto regressions (VARs), Autoregressive Conditional Heteroskedasticity (ARCH) models.	CLO2
III 11 Hours	Non-Stationarity, Unit- Roots And Cointegration: Non-stationarity in univariate models, unit- roots in vector models, Spurious regressions, Co-integration and error correction models.	CLO3
IV 11 Hours	Other Econometric Models: Forecasting with regression models, ARIMA models, Vector autoregressive models, Vector error correction models, Granger causality, Nonlinear models, Discrete-valued time series models. Practice of econometric models through SPSS/E-VIEWS/STATA package.	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Required: Hamilton, J.D. (1994): Time Series Analysis, Princeton University Press.
2. C.W.J., Newbold, P. (1986): Forecasting Economic Time Series, Academic Press (2nd edition).
3. White, H. (2000): Asymptotic Theory for Econometricians, Academic Press.
4. Enders, W. (2003): Applied Econometric Time Series.
5. Baltagi (2005), Econometric Applications of Panel Data, John Wiley and Sons, England.

Course Name: Econometrics of Panel Data**Course Code: MECO.583**

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

CLO1: set up panel data models for analysis

CLO2: construct and estimate spatial panel data models

CLO3: construct and estimate dynamic panel data models

CLO4: construct and estimate Bayesian and non-parametric panel data models

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Introduction to Panel data in Economics- Advantages of Panel data, Issues of Panel data, Non-stationarity, Panel Co-integration.	CLO1

II 12 Hours	Review Of Spatial Panel Data Models -Fixed and Random effect models: Specification, estimation and inference; Error components: A variance decomposition, GLS within groups and between groups, Testing for correlated unobserved Heterogeneity, Arellano Specification test, Robust Alternative; Introduction to unbalanced Panel data models.	CLO2
III 11 Hours	Dynamic Panel Data Models-Lagged dependent variable model, GMM Estimation, Time Varying co-efficient model, Simultaneous Equation model in Panel Data	CLO3
IV 11 Hours	Bayesian and Non-Parametric Estimation -Non parametric estimation-theoretical bias and variance of Nadaraya – Watson estimators, confidence interval, Band width choice, treatment effect, Introduction to Bayesian Regression	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Baltagi, B. (2008). *Econometric analysis of panel data*. John Wiley & Sons.
2. Cameron, A. C., & Trivedi, P. K. (2005). *Microeconometrics: methods and applications*. Cambridge university press.
3. Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data*. MIT press
4. Green, W. H. (1997). *Econometric analysis*. Maxwell Macmillan International.
5. Baltagi, B. H. (Ed.). (2015). *The Oxford handbook of panel data*. Oxford Handbooks.
6. Arellano, M. (2003). *Panel data econometrics*. Oxford university press.
7. Baltagi, B. H., & Hashem Pesaran, M. (2007). Heterogeneity and cross section dependence in panel data models: theory and applications introduction.
8. Baltagi, B. H., & Song, S. H. (2006). Unbalanced panel data: A survey. *Statistical Papers*, 47(4), 493- 523.
9. Biørn, E. (2016). *Econometrics of panel data: Methods and applications*. Oxford University Press.
10. Breitung, J., & Pesaran, M. H. (2008). Unit roots and cointegration in panels. In *The econometrics of panel data* (pp. 279-322). Springer, Berlin, Heidelberg.
11. Edward W. Frees (2004): *Longitudinal and Panel Data*, Cambridge University Press.
12. Elhorst, P., Zandberg, E., & De Haan, J. (2013). The impact of interaction effects among neighbouring countries on financial liberalization and reform: A dynamic spatial panel data approach. *Spatial Economic Analysis*, 8(3), 293-313.
13. Hsiao, C. (2014). *Analysis of panel data* (No. 54). Cambridge university press.
14. Lee, L. F., & Yu, J. (2010). Some recent developments in spatial panel data models. *Regional Science and Urban Economics*, 40(5), 255-271.
15. Pesaran, M. H. (2015). *Time series and panel data econometrics*. Oxford University Press.

Course Name: Industrial/Field Visits

Course Code: MECO.596

Course Learning Outcomes: On completion of this course, learners will be able to:

L	T	P	Credit
0	0	1	1

CLO1: learn pragmatic skills to face real-world situations

CLO2: apply real-world exposure to bridge gaps in theory and practice

CLO3: gain skills like communication, networking, teamwork, problem solving, and critical thinking

Instructions: All the students shall be taken by the department teacher(s) for an industrial visit and/or visit to villages in the nearby areas of the university to give practical real-world exposure to develop within them competency and skills such as communication, networking, teamwork, problem solving, and critical thinking. This visit shall be scheduled on a particular working day as decided during the semester.

Course Name: Resource Economics**Course Code: MECO.584**

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

CLO1: understand the economics fisheries

CLO2: comprehend the economics of forestry

CLO3: learn the dynamics of non-renewable resources

CLO4: suggest policies for addressing the issues related to pollutions and climate change

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Economics of Fisheries: Biological growth functions; Fishery production functions; Yield-effort function; Static and dynamic models of open access; Regulated access and maximization of rent; Management policies and regulatory frameworks	CLO1
II 12 Hours	Economics of Forestry: Volume function and Mean Annual Increment; Optimal rotation; Faustmann rotation – timber and non-timber forest products; Forestry policies; Economics of conservation of land use	CLO2
III 11 Hours	Economics of Non-renewable Resources: Hotelling rule; Extraction and price profiles – competitive, monopoly, and other market structures; Reserve dependent costs; Exploration; Measures of scarcity; Empirics and Hotelling rule	CLO3
IV 11 Hours	Water Economics: Policy context; Static and dynamic market failure; Models of water economics; Common property game; Water markets – case studies; Economics of Stock Pollutants: Degradable and non-degradable stock pollutants; Optimal resource extraction with non-degradable waste; Climate change; Emission taxes and marketable pollution permits	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Conrad, J.M., Resource Economics – 2nd Edition; Cambridge University Press, 2010.
2. Perman, Roger, Yue Ma, Michael Common, David Maddison, James McGilvray, Natural Resource and Environmental Economics – 4th Edition, Pearson, 2012.
3. Amacher, G.S., M. Ollikainen, E. Koskela, Economics of Forest Resources, MIT Press, 2009.
4. Karp, L., Natural Resources as Capital, MIT Press, 2017.

Course Name: Financial Economics**Course Code: MECO.585**

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

CLO1: understand the dynamics of functioning of financial markets

CLO2: make decisions under situations of market uncertainties

CLO3: make a trade-off between risks and returns

CLO4: discover appropriate prices for financial assets

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Introduction to Financial Markets: Capital markets, consumption and investments with and without capital markets, market places and transaction costs and the breakdown of separation; Fisher separation theorem; the agency problem; maximization of shareholder's wealth, capital budgeting techniques	CLO1

II 12 Hours	Choice under Uncertainty: Axioms of choice under uncertainty; utility functions; expected utility theorem; certainty equivalence, measures of risk-absolute and relative risk aversions; stochastic dominance-first order, second order and third order; measures of investment risk-variance of return, semi-variance of return, shortfall probabilities	CLO2
III 11 Hours	Mean-Variance Portfolio Theory: Measuring portfolio return and risks, effect of diversification, minimum variance portfolio, perfectly correlated assets, minimum variance opportunity set, static portfolio choice; mean variance frontier of risky and risk-free asset.	CLO3
IV 11 Hours	Introduction to Asset Pricing: Capital asset pricing model; empirical methods to test models of asset pricing; Factor models and cross section of stock returns; arbitrage pricing theory and models Efficient Market Hypothesis: Defining capital market efficiency, relationship between the value of information and efficient capital markets, rational expectations and market efficiency, market efficiency with costly information, efficient capital market theory and empirical models	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Copeland, T. E. and J. F. Weston, Financial Theory and Corporate Policy, Addison Wesley, 1992
2. Elton, E.J and M.J. Gruber, Modern Portfolio Theory & Investment Analysis, (fourth edition) John Wiley & Sons 1991.
3. Houthakker, H.S. and P.J. Williamson, Economics of Financial Markets, Oxford University Press, 1996
4. John Y. Campbell and Luis M. Viceira, Strategic Asset Allocation: Portfolio Choice for Long Term Investors, Oxford University Press, 2002 .
5. Christian Gollier, The Economics of Risk and Time, MIT Press, 2001

Course Name: Economics of Global Climate Change

Course Code: MECO.586

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

CLO1: understand the basic concepts/Principles of climate change

CLO2: analyse the various issues of climate change through case studies

CLO3: apply the knowledge in understanding practical problems

CLO4: execute/create the project or field assignment as per the knowledge gained in the course

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Understanding Climate Change: Introduction to the Climate System, Drivers of Climate system, Climate Change and Natural Variability; Economics, ethics and climate change; ethical frameworks and inter-temporal equity.	CLO1
II 12 Hours	The Impacts of climate change on growth and development: How climate change will affect people around the world, Implications of climate change for development, Costs of climate change in developed countries, Economic modelling of climate change, Climate change impacts on society, Displacement and migration, Human settlement and Health; Impact of climate change on marginalized sections.	CLO2

III 11 Hours	Optimal Climate Policy: Economic efficiency, carbon abatement costs, social cost of carbon, discounting; National climate policy: externalities, cost effectiveness, carbon tax, cap-and-trade, induced innovation; Climate change and equity: economic incidence, environmental justice, residential sorting; Climate change and the environmental Kuznets curve.	CLO3
IV 11 Hours	Climate Change and India's Concerns: United Nations Framework Convention on Climate Change, The Kyoto Protocol to the Framework Convention; Climate Change Impacts on Natural Resources, Vulnerability of Coastal Belt in India towards climate Change; Climate Change, Rural Livelihoods and Food Security in India, India's Position on International Climate Negotiations; India's National Action Plan on Climate Change.	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Keohane and Olmstead, (2016). Markets and the Environment. Island Press
2. Stern, Nicholas (2008), "The Economics of Climate Change", American Economic Review: Papers & Proceedings, 98(2), 1-37.
3. Nordhaus, W. (2013). Chapter 16 - Integrated Economic and Climate Modeling.
4. Handbook of Computable General Equilibrium Modeling. B. D. Peter and W. J. Dale, Elsevier. Volume 1: 1069-1131. Read up to Section 16.1.10.
5. Ackerman, F., S.J. DeCanio, R.B. Howarth, and K. Sheeran. 2009. "Limitations of integrated assessment models of climate change." Climatic Change.
6. Hepburn, Cameron (2006), "Discounting climate change damages: Working note for the Stern review".
7. Keohane and Olmstead, (2016). Markets and the Environment. Island Press
8. Goulder and Parry, "Instrument Choice in Environmental Policy." Review of Environmental Economics and Policy 2008.)
9. Aldy, Krupnick, Newell, Parry, and Pizer, "Designing Climate Mitigation Policy." Journal of Economic Literature, 2010) Section 3.
10. Goulder "Markets for Pollution Allowances: What Are the (New) Lessons?" Journal of Economic Perspectives 27(1), Winter 2013.
11. ARE, Special Issue: California's Climate Change Policy: The Economic and Environmental Impacts of AB 32—Notes from the Editors, 2010,
12. Fullerton and Muehlegger (2019). "Who Bears the Economic Burdens of Environmental Regulations," Review of Environmental Economics and Policy
13. Banzhaf, Ma, and Timmins (2019). "Environmental Justice: The Economics of Race, Place, and Pollution," Journal of Economic Perspectives.
14. Climate Change and Agriculture in India: By: K. Palanisami (Author) , C. R. Ranganathan (Author) , Udaya Sekhar Nagothu (Author) , Krishna Reddy Kakumanu (Author) | Publisher: Routledge India

Course Name: Urban Economics

Course Code: MECO.587

Course Learning Outcomes: On completion of this course, learners will be able to:

CLO1: understand the basics of urban economics

CLO2: comprehend the fundamental theories of urban economics

CLO3: understand the ground level problem in an urban economy

CLO4: suggest policies for resolving the problems of an urban economy in India

Units/Hours	Contents	Mapping with CLO
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I 11 Hours	Nature and scope of urban Economics, structure and growth of Urban economy, urban Public Services; Growth of Urban Economy.	CLO1
II 12 Hours	Urban Growth; Central Place Theory and its application to the study of Urban Growth-the Urban economic base and urban growth; the communication theory of Urban growth; City size and urban growth; urban spatial structure; Concentric Zone Hypothesis-The Radial Sector theory. The Multiple Nuclei Hypothesis.	CLO2
III 11 Hours	Urban Housing, Labour Market and Poverty; Housing market Imperfection-trends in slum Housing-tearing down the slums. Urban Labour Market: Determination of Labour incomes-wage differentials-the culture of urban poverty –Measures of Urban poverty-The nature and causes of urban poverty; Public Policies for reducing urban poverty-macroeconomic policies income-Maintenance Policies-negative income taxes.	CLO3
IV 11 Hours	Urban Development Problems in India, Land Prices and land Speculation-Urban Land ceiling; Congestion and Urban transport pricing Policy; Cost and supply of alternative urban transport system. Urban Growth Strategies-An approach to Metropolitan Planning in Developing Countries; national urbanization policy with reference of India.	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. O'Sullivan, A. (2019). Urban Economics, McGraw-Hill, Boston, 9th ed.
2. Capello, R., Nijkamp, P. (2004). (ed.). Urban Dynamics and Growth: Advances in Urban Economics, Elsevier Inc.
3. Prasad, P. (2022). Urban Economics, AG Publishing House
4. G. F. Bussars (1964). Rapid Problems of Urbanisation in India. Popular Prakashan
5. R.K. Bharadwaj (1974). Urban Development in India. National Publishing House
6. Ashish Bose (1973). Studies in India's Urbanization. Tata McGraw-Hill Publications
7. Richard F. Moth (1975). Urban Economic Problems. Joanna Cotler Books
8. Harry, S. Perloff (1968). Issues in Urban economics. The Johns Hopkins Press, Washington DC
9. Harry, W. Richardson (1971). Urban Economics. Penguin Books

Course Name: Institutional Economics

Course Code: MECO.588

Course Learning Outcomes: On completion of this course, learners will be able to:

L	T	P	Credit
3	0	0	3

CLO1: understand the basics of institutional economics

CLO2: comprehend the problems of information asymmetry

CLO3: understand the of property rights

CLO4: learn the methods of resolving the issues related to transaction cost

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Basic Introduction To Institutional Economics: Institutional Economics as a departure from Neo-Classical and Marxian Economics, Historic development of Institutional Economics, Old and New Institutional Economics, Core issues in New Institutional Economics.	CLO1
II 12 Hours	Problems Of Information Asymmetry: Prisoner's dilemma and Nash equilibrium, Assurance problem, Principal-Agent Problem, Problem of Adverse Selection, Problem of Moral Hazard, Market for Lemons, Market Signalling.	CLO2

III 11 Hours	Property Rights Issues : Concepts of Property and defining Property Rights, Problems of Ill-defined Property rights, Externalities-Market failure and property rights, Issues relating to ill-defined property rights, Social vis-à-vis Individual Choices, Neo-classical Maximisation vis-à-vis Methodological Individualism, Prisoner's Dilemma, Hardin's Tragedy of Commons, Collective Action, and Assurance Problem.	CLO3
IV 11 Hours	Transaction Costs And Bounded Rationality: Issues relating to transaction costs, Social cost vis-à-vis individual costs, Identification and measurements of transaction costs, Coase Theorem, Bounded Rationality, Public Policy, Insurance Sector, Social issues, Ecological and Environmental Issues.	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Furburton & Richter, 'Institutions and Economic Theory', Dryden Press.
2. Pindyck, Robert S., Rubinfeld, Daniell L., & Mehta, Prem L., "Microeconomics", 7th Edition, (2009), Pearson.
3. Frank, Robert H., "Micro Economics and Behaviour", McGraw Hill International Editions, (1991).
4. Eggertson, Thrainn, "Economic Behaviour and Institutions", Cambridge University Press, (1999).
5. North, Douglas C., "Institutional Change and Economic Performance", Cambridge University Press, (2004).
6. Olson Mancur (1965), the Logic of Collective Action, Harvard University Press, Cambridge.
7. Shaw, M E. (1971). Group Dynamics: The Psychology of Small Group Behaviour, McGraw Hill, New York.
8. Ahuja H. L., "Advanced Economic Theory – Microeconomic Analysis", 17th Revised Edition, (2008), S. Chand & Company Ltd.

Course Name: Sustainable Development

Course Code: MECO.589

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

CLO1: understand the basics of sustainable development

CLO2: comprehend the fundamental methods of measuring sustainable development

CLO3: understand the basics of ecological economics

CLO4: comprehend the vision and operational procedures of sustainable development

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Introduction: Need for studying the economics of sustainable development; meaning of sustainable development – Comparison with static and dynamic economic efficiency; Weak <i>versus</i> strong sustainability; Rawls and Solow Sustainability, role of discounting, Inter- and Intra-generational equity and sustainability; Valuing Market and Non-market Ecosystem and Social Services: Uses of monetary valuation; Cost-benefit analysis; Techniques of monetary valuation – recap; Applications	CLO1
II 12 Hours	Measuring Sustainable Development: Defining conventional gross net product (GNP); modifying GNP for missing (non-market) values – Green GNP; genuine savings; critical natural capital concerns and strong sustainability	CLO2
III 11 Hours	Sustainable Development – Ecological Economics: Precautionary Principle; biodiversity and precautionary principle; economic growth and natural carrying capacity	CLO3

IV 11 Hours	Sustainable Development – Visions, Principles, and Operational Rules: Indicators of Sustainability and Sustainable Development Goals Indicators; Neoclassical economic growth, Inclusive and comprehensive wealth and sustainability; social capital, community sustainability and environmental justice; trans-boundary environmental degradation; global economic integration and environment	CLO4
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Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Pearce, D. and E. Barbier, *Blueprint for a Sustainable Economy*, Earthscan, 2000.
2. Daly, H.E., *Beyond Growth: The Economics of Sustainable Development*, Beacon Press, 1996.
3. Rogers, P. K.F. Jalal and J.A. Boyd, *An Introduction to Sustainable Development*, Earthscan, 2008 .
4. Deb, D. *Beyond Developmentality: Constructing Inclusive Freedom and Sustainability*, Daanish Books, 2009
5. Sengupta, R. (2012), *Ecological Limits and Economic Development*, Oxford University Press, Delhi
6. Murty, M.N. (2009), *Environment, Sustainable Development, and Well-being: Valuation, Taxes and Incentives*, Oxford University Press, Delhi
7. UNU-HIS, UNEP, *Inclusive Wealth Report 2012: Measuring Progress Towards Sustainability*, Cambridge University Press, 2012.
8. UNU-HIS, UNEP, *Inclusive Wealth Report 2014: Measuring Progress Towards Sustainability*, Cambridge University Press, 2014

Course Name: Economics of Insurance

Course Code: MECO.590

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

CLO1: understand the basics of insurance economics

CLO2: comprehend the fundamentals of risk and risk management

CLO3: relate insurance with economic growth and development

CLO4: comprehend the functioning of insurance sector in India

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Introduction: Economic Security; Human quest for economic security through time, exposure to losses; Role of insurance; Definition of insurance. Risk pooling and risk transfer; Economic and legal perspectives; Social Vs Private insurance; Life Vs Non-life insurance; Classification of life, Health and General Insurance policies.	CLO1
II 12 Hours	Risk and Risk Management Fundamentals of uncertainty and risk; Pure risk and speculative risk; Expected utility and decision making under uncertainty; Expected utility and the demand for insurance; Moral hazards and insurance demand; Concept of risk management; Essentials of risk management; Elements of risk management, Risk assessment; Risk control and risk financing.	CLO2
III 11 Hours	Insurance and Economic Development Risk management and insurance in economic development, Insurance institutions as financial intermediaries, Insurance institutions as investment institutions, insurance institutions in Indian capital market. World Wide risk sharing - Concept of reinsurance, Fundamentals of reinsurance, Types of reinsurance; Reinsurance distribution systems; Reinsurance markets in Developing countries.	CLO3

IV 11 Hours	Types of Insurance: Fundamentals of Life; Health and General Insurance; Functions and importance of Life, Health and General Insurance; Mathematical basis of life insurance; Plans and legal aspects of life insurance; Provisions of policies, Selection and classification of risks; Types of evaluation; Insurance for Retirement Needs and Regulation Retirement Planning Strategies: Investment for retirement, Pension Plans, Pension Plans in India; Regulation of insurance; Theories of regulation, insurance regulation in India; Insurance Regulation and Development Authority.	CLO4
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Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Bailey R (Ed) (1999), Underwriting in Life and Insurance, LOMA, Atlanta, Ga.
2. Bhole, L.M. (1990) The Indian Financial System, Tata McGraw Hill, New Delhi.
3. Bickelhaupt, D.L. (1992), General Insurance, Irwin. Inc. Burr Ridge.
4. Black K.Jr. and H.D. Skipper Jr(2000), Life and Health Insurance, Prentice Hall, Upper Saddle River, New Jersey
5. Finsinger, J, and MV. Pauly (Eds). (1986), The Economic of Insurance Regulation: A Cross National Study, Macmillan, London.
6. Graver E.E and L.N.Hayes (Eds). (1994) Mc. Grill's Life insurance. The American College, Bryn Mawr Pa.
7. Hedad, G.L. and S. Horn II (1991), Essentials of Risk Management, Vol.1 Insurance Institute of America, Malvern, Pa.
8. Skipper, Jr.H.D. (Ed) (1988). International Risk and Insurance: An Environmental Managerial Approach, IrwinMc.Graw Hill, Boston.
9. Tacchino, K.B. and D.A. Little (1993), Planning for Retirement Needs, The American College, Bryn mawr, pa.

Course Name: Economics and Law

Course Code: MECO.591

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

CLO1: understand the relationship between law and consumer activities

CLO2: comprehend the relationship between law and business organizations

CLO3: understand the economics of crime and punishment

CLO4: relate macroeconomics, international aspects and law

Units/Hours	Contents	Mapping with CLO
I 15 Hours	Law and Consumer activities: Bargaining Theory; Economic Theory of contract, Remedies as incentives, Duress; Tort Law, Tort Liability and economic models; economics of accidents; fault, victim and strict liability; consumer protection and consumer Courts.	CLO1
II 15 Hours	Law and Business Organisations: Structure of firm-Kinds, Corporation, Corporate vest, Capital, shares, debentures, insiders' trading; Anti Trust; RBI, IRDAI, MRTP, SEBI, Economics of mergers, Amalgamations and takeovers.	CLO2
III 15 Hours	Economic Theory of Crime and Punishment: The traditional theory of Criminal law: Economic Theory of Crime and punishment; Reforms of Criminal Procedure and Futility Theses; Law relating to economic offences-Corruption and Human rights.	CLO3

IV 15 Hours	Macroeconomics, International Aspects and Law: Property rights, Distribution of income and Law; Economic and Social costs of poverty: Economics of Social Sector; Wealth Distribution by liability Rules, Progressive Taxation and Efficiency; National and Global Environmental problems. W.T.O-TRIPS and TRIMS, export-import Policy, MNCS and Foreign Direct investment; FEMA.	CLO4
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Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Bouckaert, B and G.DeGeest (Ed). (1999) Encyclopaedia of Law and Economics (Volume I to V) Edward Elagr Publishing Ltd., UK.
2. Cooter, R.D. and T.S. Ulen (Ed) (2000). Law and Economics (3rd Edition), Addison Wesley, NY.
3. Dan Schmidt, K.G. And T.S. Ulen (2000), Law and Economics, (3rd Edition) Addison Wesley, NY.
4. Newman, P. (Ed) (1998), The New palgrave dictionary of Economic and Law, Stockton Pre York.
5. Oliver J.M. (1979), Law and Economics, George Allen and Unwin, London.
6. Posner, R.A. (1998), Economic Analysis of Law (5th edition), Little Brown, Boston.
7. Posner, R.A. and F. Parist (Eds). (1997), Law and Economics, Edward.
8. Elgar Publishing Ltd., UK. Masseyu, L.P. (1995), Administrative Law, Eastern Book Company.
9. Lucknow Indian Law institute, Annual Survey of Indian Law, Indian Law institute, New Delhi.

Course Name: Economics Public-Private Partnership

Course Code: MECO.592

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

CLO1: understand the basics of public-private partnership

CLO2: conduct financial analyses related to public-private partnership projects

CLO3: design tender and contract documents related to public-private partnership projects

CLO4: effectively implement and monitor public-private partnership projects

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Introduction to PPP: Introduction to PPP; Rationale, Characteristics and Models in PPP; Key success factors and pitfalls in PPP projects; examples of how to do PPPs', Addressing key aspects in PPP project identification and preparation - due diligences, service delivery; transaction advisory; Importance of communications and its strategy; Successful case studies.	CLO1
II 12 Hours	Financial Analysis: Appropriate project structuring and financial viability analysis and value for money conceptual frameworks; Concepts influencing financial analysis including demand, risk and cost explored; Financial analysis techniques on the impact and influence framing and structuring of a PPP model.	CLO2
III 11 Hours	Tendering and Contracting: Different approaches to bidding, a typical two-stage bidding sequence, main features of bid process management, and of the model RfQ, RfP documents, stakeholder obligations and condition precedents as per Concession Agreement, and relevant case examples.	CLO3
IV 11 Hours	Implementation and Monitoring: Critical elements of contract management including service delivery, contract administration and relationship management and the integration of these elements into a formalized contract management plan, and case examples.	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Delmon, Jeffrey. *Public-Private Partnership Projects in Infrastructure*, 2nd Edition. CUP, 2017.

2. IMF and WB. *Public-Private Partnerships Fiscal Risk Assessment Model User Guide*, Washington, IMF. 2016. Nishizawa, Toshiro. "Changes in Development Finance in Asia: Trends, Challenges, and Policy Implications." Asian Economic Policy Review. Volume 6, Issue 2 (December). 2011.
3. Goldsmith et al. *Governing by Network: The new Shape of the Public Sector*, The Brookings Institution. 2004.
4. Rohr, John A. *Public service, ethics, and constitutional practice*. Lawrence, KS: University Press of Kansas. 1998.
5. Nishizawa, Toshiro. "Infrastructure Investment and Finance in Asia." Public Policy Review, Policy Research Institute, Ministry of Finance, Japan, Vol. 14, No.5 pp. 925-953, 2018.
6. Schiffler, Manuel. *Water, Politics and Money: A Reality Check on Privatization*. New York: Springer, 2015.
7. Verougstraete et al. *Mobilizing Private Funding: the Case of the National Highways of India*. PPP Case Study, UN ESCAP. 2014.

Course Name: Economics of Tourism

Course Code: MECO.593

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

CLO1: understand the basics of travel and tourism industry

CLO2: evaluate the tourism policy in India

CLO3: relate tourism and economic growth and development

CLO4: suggest policies for promotion of travel and tourism business

Units/Hours	Contents	Mapping with CLO
I 11 Hours	The Travel and Tourism Industry: The nature and characteristics of travel and tourism industry – definition of tourism – types of tourism – issues of industry – tourist motivation – tour operation- planning travel and tourism – marketing in travel and tourism-society and culture – transport for travel and tourism.	CLO1
II 12 Hours	Tourism policy of India: Investment in Indian tourism – Eco-tourism policy – Growth of tourism – sector in India – national tourism policy	CLO2
III 11 Hours	Tourism and Economic Development Economics of tourism – environmental management of tourism development – economic effects of tourism – economic impact analysis – Direct and Indirect effects of tourism earnings	CLO3
IV 11 Hours	Travel and Tourism customer Internal and external customers – needs and wants of different customers – providing effective customer skills – interpersonal skills – communication skills – product knowledge – meeting different customer needs. Business in Travel and Tourism Marketing mix and business tourism – business travel management – benefits of business travel and tourism of destination – origin of business travel and tourism – Hotel staff management – nature of services – customer services in hospitality industry.	CLO4

Transaction Mode: Class Lecture, Blended Learning, Discussion & Demonstration, and Case Studies

Suggested Readings:

1. Tourism, Travel, Hotel and Hospitality Author: Yaduraj Choudhary Random Publications, New Delhi
2. New Facets of Tourism Management Author: Varinder Rama Random Publications, New Delhi
3. Travel & Tourism Authors: Lindsey Taylor, Ray Barker, Nicki Stephenson Colhins, London
4. Travel and Tourism Author: Richard Sharplay Sage Publication, New Delhi

Course Name: Applied Environmental Economics**Course Code: MECO.594**

L	T	P	Credit
3	0	0	3

Course Learning Outcomes: On completion of this course, learners will be able to:

CLO1: analyze valuation methods for environmental goods and services

CLO2: evaluate policy instruments for pollution control, resource management, and circular economy strategies

CLO3: assess climate change economics, carbon pricing mechanisms, and environmental justice issues

CLO4: examine global environmental governance, international agreements, and policy evaluation frameworks

Units/Hours	Contents	Mapping with CLO
I 11 Hours	Foundations of Applied Environmental Economics: the evaluation of regulatory and market based instruments in controlling pollution; moral suasion and voluntary regulation; Cost-Benefit Analysis and Environmental Impact Assessment, health and the environment	CLO1
II 12 Hours	Environmental Policy Instruments and Resource Management: Behavioural and happiness economics and the environment. Economics of natural resource use; economic growth, the environment and sustainable development; Circular Economy and Waste Management Strategies	CLO2
III 11 Hours	Applied Topics in Climate Change and Environmental Justice: climate change economics; Carbon Pricing: Taxes, Cap-and-Trade, and Social Cost of Carbon, Environmental Inequality and Climate Justice; Sustainable Agriculture and Food Systems, Urban Environmental Challenges and Green Infrastructure	CLO3
IV 11 Hours	Environmental Governance and Regional/Global Cooperation: Environmental Governance: Local, National, and Global Institutions, Evaluation of Environmental Policies through Case Studies, Future Challenges and Policy Innovations	CLO4

Transaction Mode: Lecture, case study, problem solving, group discussion & demonstration, self-study, peer learning, experiential learning, blended learning, field survey.

Suggested Readings:

1. Keohane, N. & Olmstead, S. (2016). *Markets and the Environment*. Island Press
2. Stavins, R. N. (Ed.). (2019). *Economics of the Environment*. W.W. Norton
3. Tietenberg, T. & Lewis, L. (2020). *Environmental and Natural Resource Economics*
4. Hanley, N., Shogren, J. & White, B. (2019). *Introduction to Environmental Economics*
5. Bateman, I. et al. (2003). *Applied Environmental Economics: A GIS Approach*
6. OECD (2018). *Cost-Benefit Analysis and the Environment*
7. UN (2021). *System of Environmental-Economic Accounting (SEEA)*