CURRICULUM FRAMEWORK FOR
POST-GRADUATE PROGRAMME IN ECONOMICS
AS PER NATIONAL EDUCATION POLICY (NEP)- 2020

SYLLABUS

**WITH EFFECT FROM THE
ACADEMIC YEAR: 2024-25**

ARUNACHAL PRADESH UNIVERSITY-A STATE UNIVERSITY
DEPARTMENT OF ECONOMICS HILL TOP
PASIGHAT, EAST SIANG DISTRICT
ARUNACHAL PRADESH -791103

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

1.0 The Preamble

Knowledge creation and research have been found pivotal to economic growth in any society. India stands no exception to it. With a fastest-growing pace in economy, India is forging ahead to reckon a leading status in the world economy in the coming years and decades. Hence a robust ecosystem of research with a vast talent pool is need of the hour. To see this to happen, the country needs a significant expansion of its research capabilities and output across disciplines. The higher education sector is expected to expand exponentially with the possible addition of more youth into its fold. A major thrust, therefore, is given in NEP 2020 with initiatives such as multidisciplinary education with multiple entry and exit options, research at the undergraduate level, learning outcomes-based curriculum approach, etc.

The postgraduate programmes help students to extend their knowledge of their chosen subject and prepare them for higher research studies. The advanced knowledge and specialized skills they gain in the PG programme are crucial to sustaining the journey of a student from the acquiring knowledge to creating knowledge.

The re-structured degree programmes are promoted in both undergraduate and postgraduate education. The NEP 2020 states that "the undergraduate degree will be of either 3 or 4-year duration with appropriate certifications, e.g., a UG certificate after completing1 year in a discipline or field including vocational and professional areas, or a UG diploma after 2 years of study, or a Bachelor's degree after a 3-year programme. The 4-year multidisciplinary Bachelor's programme, however, shall be the preferred option since it allows the opportunity to experience the full range of holistic and multidisciplinary education in addition to a focus on the chosen major and minors as per the choices of the student". In conformity with the restructured undergraduate programmes mentioned above, the policy says HEIs will have the flexibility to offer different designs of Master's programmes also.

1.1 Recommendations of NEP 2020 relevant to Post graduate Programme:

- There may be a 2-year programme with the second year devoted entirely to research for those who have completed the 3-year Bachelor's programme.
- For students completing a 4-year Bachelor's programme with Honours/Honours with Research, there could be a 1-year Master's programme.
- Universities will aim to offer Masters programmes in core areas such as Machine Learning as well as multidisciplinary fields "AI + X" and professional areas like health care, agriculture, and law.
- There shall be a National Higher Education Qualifications Framework (NHEQF). Higher education qualifications leading to a degree/diploma/certificate shall be described by the NHEQF in terms of such learning outcomes. Accordingly, the levels prescribed for the master's programme are levels 6, 6.5, and 7.
- PG framework should be in sync with National Credit Framework (NCrF) for the creditization of all learning and assignment, accumulation, storage, transfer & redemption of credits, subject to assessment.

1.2 Department of Economics, Arunachal Pradesh University

The Department of Economics, Arunachal Pradesh University offers only following Master of Arts in Economics Programme.

1. 2-yearprogrammewiththesecondyeardevotedentirelyto research for those who have completed the 3-year Bachelor's programme.
2. 1-year Master's programme for students completing a 4-year Bachelor's programme with Honours/Honours with Research.

1.3 Credit requirement and Eligibility for the Master of Arts in Economics Programme:

A 3-year/6-semester bachelor's degree with a minimum of 120 credits for a 2-year/4- semester Master's programme at level 6.5 on the NHEQF.

In accordance with the NHEQF, the levels for the **Master of Arts in Economics** are given in the Table.1

Table 1: Credit Requirements and Eligibility for the Master's Programme

Sr.No.	ProgrammeName/Qualifications	Level	Credits	Credit Points
1	PGDiploma	6	40	240
2	1-Year PG after a 4-year UG	6.5	40	260
3	2-Year PG after a 3-year UG	6.5	40+40	260
4	2-Year PG after a 4 year UG such as B.E.,B.Tech.etc.	7	40+40	280

1.4 Graduate Attributes of PG Programmes

Qualifications that signify completion of the postgraduate degree are awarded to students who:

- have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context.
- can apply their knowledge and understanding, and problem-solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study;
- have the ability to integrate knowledge and handle complexity, and formulate judgments with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgments;
- can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously;
- have the learning skills toallowthemtocontinuetostudyinamannerthatmaybelargelyself-directedorautonomous.

Accordingly, the NHEQF outlines the statement of learning achievements at a particular level on the basis of the following elements of descriptors:

• Knowledge and understanding
• General, technical, and professional skills required to perform and accomplish tasks
• Application of knowledge and skills
• Generic learning outcomes
• Constitutional, humanistic, ethical, and moral values
• Employability and job-ready skills, and entrepreneurship skills and capabilities/qualities and mindset.

1.5 Curricular Components

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
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For 2-yearMaster of Arts in Economics: Students entering 2-year Master of Arts in Economics after a 3-year UG programme can choose to do (i) only course work in the third and fourth semester or (ii) course work in the third semester and research in the fourth semester or (iii) only research in the third and fourth semester.

1-year Master of Arts in Economics: Students entering 1-year Master of Arts in Economics after a 4-year UG programme can choose to do (i) only coursework or (ii) research or (iii) coursework and research.

1.5.1 Curriculum and Credit Framework for PG

For 2-YearMaster of Arts in Economics

Curricular Components		Two-Year Master of Arts in Economics Programme Minimum Credits			
		Course Level	Coursework	Research Thesis/Project/Patent	Total Credits
1stYear (1st&2ndSemester)		400 500	20 20	--	40
Students who exit at the end of 1st year shall be a warded a Postgraduate Diploma in Economics					
2nd Year (3rd & 4th Semester)	Research **(MODEL 1)**	-	-	**40**	**40**
	Coursework and Research **(MODEL 2)**	**500**	**20**	**20**	**40**
	Coursework **(MODEL 3)**	**500**	**40**	**-**	**40**

1.5.2 Credit Distribution

a) For1-yearMaster of Arts in Economics

Department of Economics shall follow Coursework + Research Model for1-year Master of Arts in Economics.

Curricular Components	One-Year Master of Arts in Economics Programme Minimum Credits			
	Course Level	Coursework	Research thesis/project/Patent	Total Credits
Coursework + Research	**500**	**20**	**20**	**40**

b) 2 Year Master of Arts in Economics

Curricular Components	Two-Year Master of Arts in Economics Programme Minimum Credits			
	Course Level	Course work	Research Thesis/Project/Patent	Total Credits
1stYear (1st&2nd Semester)	400 500	20 20	--	40
Students who exit at the end of 1st year shall be awarded a Postgraduate Diploma in				

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Economics					
2nd Year (3rd & 4th Semester)	Course Work and Research	**500**	**20**	**20**	**40**

c) For1-yearMasterofArtsinEconomics

Department of Economics shall follow Coursework + Research Model for 1-year Master of Arts in Economics.

Curricular Components	One-Year Master of Arts in Economics Programme Minimum Credits			
	Course Level	Coursework	Research Thesis/project/Patent	Total Credits
Coursework + Research	**500**	**20**	**20**	**40**

d) 2 Year Master of Arts in Economics

Curricular Components		Two-Year Master of Arts in Economics Programme Minimum Credits			
		Course Level	Coursework	Research Thesis/Project/Patent	Total Credits
1st Year (1st&2ndSemester)		400 500	20 20	--	40
Students who exit at the end of 1st year shall be awarded a Postgraduate Diploma in Economics					
2nd Year (3rd &4th Semester)	Course Work and Research	**500**	**20**	**20**	**40**

1.5.3 Exit Point

1. In case of M.A. in P Economics (1 Year) programme, there shall be no exit point. All enrolled students have to complete their post-graduation within 1-year duration/two semesters.

In case of M.A. in P Economics (2 Year) programme, there shall only be one exit point for those who join the two-year PG programme. However, students who exit at the end of the 1st year shall be awarded a Postgraduate Diploma in Economics and they shall have to complete their PG within a duration of 4 years.

1.6 Course Levels

400-499: Advanced courses which would include lecture courses with practicum, seminar-based courses, term papers, research methodology, advanced software training, research projects, hands-on training, internship/apprenticeship projects at the undergraduate level or first-year postgraduate theoretical and practical courses.

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500-599: For students who have graduated with a 4-year bachelor's degree. It provides an opportunity for original study or investigation in the major or field of specialization, on an individual and more autonomous basis at the postgraduate level.

1.7 Flexibility

- Flexibility is one of the hallmarks of NEP 2020. The benefit of pursuing M.A. in Economics is that it offers great flexibility viz. enrolling in online programmes, pursuing two postgraduate programmes simultaneously, creditizing work experience, etc. Also, it is noticeable that postgraduate programmes which are entirely online allow students to participate in the programme along with their current responsibilities. This makes earning a postgraduate degree while continuing to work easier and more accessible to individuals.
- Another opportunity for students is the facility to pursue two academic programmes simultaneously: 1) in two full-time academic programmes in the physical mode provided that there is no overlapping of class timings between the two programmes; 2) a student can pursue two academic programmes, one in full-time physical mode and another in Open and Distance Learning (ODL)/Online mode; or up to two ODL/Online programmes simultaneously. Degree or diploma programmes under ODL/Online mode shall be pursued with only such HEIs which are recognized by UGC/Statutory Council/Govt. of India for running such programmes.
- Creditization of relevant work experience is another initiative to make education more holistic. The UGC-NCrF enables the assignment of credits for the experience attained by a person after undergoing a particular educational programme. In case a learner through employment gains experience relevant to the PG programme he/she wants to pursue, the work experience can be creditized after assessment. Accordingly, the duration can be adjusted by the RGU. The maximum weightage provided for under this dimension is two (2), i.e., a candidate/trained person can at best earn credits equal to the credits acquired for the base qualification/skill, provided he has more than a certain number of years of work experience. The redemption of credits so earned, however, shall be based on the principle of assessment bands given in the National Curriculum Framework (NCrF).
- The credit points may be redeemed as per Academic Bank of Credit (ABC) guidelines for entry or admission in higher education at multiple levels, enabling horizontal and vertical mobility with various lateral entry options.
- The principle of calculating credits acquired by a candidate by virtue of relevant experiential learning, including relevant experience and professional levels acquired, and attaining proficiency levels (post-completion of an academic grade/skill-based program) gained by the learner/student in the industry is given in the Table 1.5.1 below.

1.8 Credit Assignment for Relevant Experience/Proficiency

Experience cum Proficiency Levels	Description of the relevant Experiential learning including relevant experience and professional levels acquired and attaining proficiency levels	Weightage/ multiplication Factor	No. of years of experience (Only indicative)

Trained/Qualification Attained	Someone who has completed the course work/education/training and has been taught the skills and knowledge needed for a particular job or activity.	1	Lessthanorequalto1year
Proficient	Proficient would mean having the level of advancement in a particular profession, skill set, or knowledge.	1.33	More than 1less than or equal to 4
Expert	Expert means having high level of knowledge and experience in a trade or profession.	1.67	More than 4 less than or equal to 7
Master	Master is someone having exceptional skill or knowledge of a subject/domain.	2	More than 7

1.8.1 Assessment Strategy

TheNEP-2020 emphasizes upon formative and continuous assessment rather than summative assessment. Therefore, the scheme of assessment will have components of these two types of assessments. Assessment has to have correlations with the learning outcomes that are to be achieved by a student after completion of the course. Therefore, the mode and system of assessments have to be guided by the learning outcomes.

1.8.2 Course Evaluation/Assessment

The evaluation system in the form of marks distribution for each course in Post Graduate Programme in Economics is depicted in the credit system.

1.9 Letter Grades and Grade Points

The Semester Grade Point Average (SGPA) is computed from the grades as a measure of the student's performance in a given semester. The SGPA is based on the grades of the current term, while the Cumulative GPA(CGPA)is based on the grades in all courses taken after joining the programme of study. The HEIs may also mention marks obtained in each course and a weighted average of marks based on marks obtained in all the semesters taken together for the benefit of students.

Letter Grade	Grade Point
O(Outstanding)	10
A+(Excellent)	9
A(Very Good)	8
B+(Good)	7
B(Above Average)	6
C(Average)	5
P(Pass)	4
F(Fail)	0
Ab(Absent)	0

1.9.1Computation of SGPA and CGPA

UGC recommends the following procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

i) The SGPA is the ratio of the sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses under gone by a student, i.e.

$$\textbf{SGPA(Si)}=\sum(\textbf{Ci x Gi})/\sum\textbf{Ci}$$

where Ci is the number of credits of the i^{th}course and Gi is the grade points cored by the student in the i^{th} course.

Example for Computation of SGPA is given below:

Semester	Course	Credit	Letter Grade	Grade Point	(Credit x Grade)
1	Course1	3	A	8	3 x8=24
1	Course1	4	B+	7	4 x7= 28
1	Course1	3	B	6	3 x6=18
1	Course1	3	O	10	3x10=30
1	Course1	3	C	5	3 x5=15
1	Course1	4	B	6	4 x6=24
Total Credit		**20**			**139**
SGPA					139/20=**6.95**

ii) The Cumulative Grade Point Average (CGPA) is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e.

$$\textbf{CGPA}=\sum(\textbf{Ci x Si})/\sum \textbf{Ci}$$

Where Si is the SGPA of the ith semester and Ci is the total number of credits in that semester. Example for Computation of CGPA

Semester I	Semester II	Semester III	Semester IV
Credit 20 SGPA 6.9	Credit 20 SGPA 7.8	Credit 20 SGPA 5.6	Credit 20 SGPA 6.0
CGPA = (20 x 6.9 +20 x 7.8 + 20 x 5.6 + 20 x 6.0) / 80 = **6.6**			

The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

PROGRAMME OUTCOMES (PO) PROGRAMME SPECIFICOUTCOMES (PSO) COURSE OUTCOMES (CO)

INTRODUCTION:

For every stream, broad expectations listed by the university as well as Institution. The goal of creating an academic program assessment plan is to facilitate continuous program level improvement. A program assessment plan should be developed collaboratively among faculty who teach the program. A program level outcome assessment plan provide faculty with a clear understanding of how their program is assessed.

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Nomenclature Used in the Syllabus as per NEP-2020

Programme Educational Objective (PEO)
PEOs are broad statements that describe the career and professional accomplishments that graduates of a programme are expected to achieve within a few years of graduation.

Programme Outcome (PO)
POs are specific statements that describe what students are expected to know and be able to do by the time they complete a programme.

Programme Specific Outcome (PSO)
PSOs are similar to POs but are more specific to a particular specialization or focus are a within a programme.

Course Outcome (CO)
Cos are statements that describe the specific learning objectives of individual courses within a programme.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

The P.G. Programme in Economics aims to fulfill the educational objectives listed below:

PEO 1: This programme is designed to allow economic graduates be able to interpret the information from economic perspective. Hence, will be an effective economic analyst, who could successfully complete a credential test.

PEO 2: Another educational objective of this programme is for students to gain a good knowledge of world and Indian economy that will be able to assess situation and identify main economic problems and demonstrate an ability to offer alternative solution to problems. This will enhance critical thinking skills.

PEO 3: Furthermore, Graduates of economics will be able to demonstrate their proficiency and skills necessary to attract the potential employers in the field of banking sector, insurance companies, marketing field and also in the field of teaching and research.

PROGRAMMEOUTCOMES(POs)

The postgraduate program offered by the Department of Economics is a comprehensive program designed to provide students with an understanding of global, Indian, and regional Economics, with a specific emphasis on North East India and Arunachal Pradesh. It is structured to equip students with the knowledge and analytical tools needed to delve into the intricacies of economic trajectories, enabling them to make meaningful comparisons and contrasts between economic policy and developments in India and North East India.

PO1: The program encompasses courses on Financial market, International and India Economy, extending beyond the Indian subcontinent. By delving deep into the political and economic circumstances that fueled market competition and the power struggles among nations, the program offers students a holistic understanding of the post-reforms challenges and issues faced globally, with a particular focus on India. This multifaceted approach is crucial for students to contextualize the regional economy of India, especially North East India, within the broader tapestry of world economy.

PO2: Within the program, there are also courses on advanced Microeconomics and

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
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Macroeconomics policies, which will allow students to gain foundational knowledge of economy, and how they were shaped and changed during the phase of economic reforms in India. This would enable students to understand the formation of India as a country and the roots of some of the issues currently faced in the nation.

PO3: The program also includes courses on financial institution and market and economics ideas in modern India, exploring how the economics of was shaped and changed by economic reforms, as well as how developmental activities in India unfolded.

PO4: Within the framework of the post graduate program, dedicated courses specifically concentrate on the economy of North East India. This will allow students to gain insights into the region and Arunachal Pradesh in particular and the subsequent impact of economy. Understanding how North East India became integrated into the Indian Union involves examining the socio-economic changes that unfolded during various year. This economic lens enables students to navigate the nuanced layers of North East India's past, fostering a profound comprehension of the challenges and issues that persist in the region today, including complexities and opportunities related to migration, agriculture and industry, infrastructure, tourism, rural development and livelihoods.

PO5: In addition to its focus on substantive economic content, the program takes a methodological approach to economics, recognizing the importance of understanding how economist construct narratives. This becomes particularly relevant in regions like North East India and Arunachal Pradesh, where available source and data records are scarce. This not only prepares them for competitive examinations but also cultivates critical thinking skills, enabling them to navigate the complexities of world and regional economy with a discerning eye.

PO6: The program also includes an introductory course on regional and rural economy with special emphasis on North East India. Though an introductory course, it is designed to equip students with the basic theory and methodology of study at grassroots level and also to introduce them to the forms of agricultural economy located in North East India and Arunachal Pradesh. Students will be able to understand the nature of the rural economy located in this region, which will help in their future research endeavors.

PO7: The program also includes courses on research and publication ethics, which will help students understand how academic knowledge production is carried out. This will facilitate their future research endeavours.

PO8: In essence, the program goes beyond imparting factual knowledge; it endeavours to foster a deep and critical engagement with economy. By examining not only what happened in the past but also how economic policy has been driven, the program empowers students to navigate the ever-evolving landscape of economic interpretation and to contribute meaningfully to discussions surrounding the complexities of our shared economic policy.

PO9: Through this well-structured educational program, students will emerge with a well-rounded perspective, ready to face the challenges and opportunities that arise in the field of economy and beyond.

PROGRAMME SPECIFICOUTCOMES(PSOs)

The P.G. Programme in Economics aims to fulfill the programme-specific outcomes listed below:

PSO 1: Students will develop a specific approach towards varied branches of economics like modern banking, economic development and planning, microeconomics etc. Students will also able to evaluate economic issues and public policy by using economic models or data analysis

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
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while identifying underlying assumptions of the model & its limitations.

PSO 2: The students will be familiarised with the broad contours of Economics and its methodologies, tools and analysis. It enable to analyze economics and institutional arrangement of specific regions, countries, organizations, localities, industries or farms.

PSO 3: The programme will further enhance the students' understanding to formulate informed opinions on policy issues and recognise the value of opposing viewpoints that effectively communicate and debate economic ideas and policies.

Structure of the PG Diploma/One/Two Year Post-graduate Programme in Economics

*1credit for lecture=15 hours in a semester

**1credit for tutorial=15 hours in a semester

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Course Structure of 2 Years Post Graduate Degree Programme

Module - III
Course Structure for PG Diploma in ECONOMICS
One Year MA in ECONOMICS with Coursework & Research /
/Two Years M.A. in ECONOMICS with Coursework & Research

Course Structure for Two-Year Postgraduate Programme in Economics

FIRST SEMESTER (SEMESTER I)

Sl.No.	Course Code	Course Title	Credit Distribution				Marks		
			L	T	P	Total	IA	TE	Total
1	ECO/MJ/501	Advanced Microeconomics Analysis	3	1	0	4	20	80	100
2	ECO/MJ/502	Advanced Macroeconomic Analysis	3	1	0	4	20	80	100
3	ECO/MJ/503	Statistics	3	1	0	4	20	80	100
4	ECO/MJ/504	Growth and Development Economics	3	1	0	4	20	80	100
5	ECO/MJ/505	Research Methodology	3	1	0	4	20	80	100
		Total	**20**				**500**		

SECOND SEMESTER (SEMESTER II)

Sl.No.	Course Code	Course Title	Credit Distribution				Marks		
			L	T	P	Total	IA	TE	Total
1	ECO/MJ/551	Indian Economy	3	1	0	4	20	80	100
2	ECO/MJ-E/552	Public Economics	3	1	0	4	20	80	100
	ECO/MJ-E/553	Political Economics	3	1	0	4	20	80	100
3	ECO/MJ-E/554	International Economics	3	1	0	4	20	80	100
	ECO/MJ-E/555	Behavioural Economics	3	1	0	4	20	80	100
4	ECO/MJ-E/556	Financial Institutions	3	1	0	4	20	80	100
	ECO/MJ-E/557	Agricultural and Rural Development	3	1	0	4	20	80	100
5	ECO/MJ/558	Research and Publication Ethics	1	0	3	4	20	80	100
		Total	**20**				**500**		

***Note**: A student has to choose any three elective papers from ECO/MJ-E/552 to ECO/MJ-E/557.*

Exit option with PG Diploma after the first year or two semesters with the completion of courses equivalent to 40 credits OR Entry to One-Year M.A. in Economics with Research

THIRD SEMESTER (SEMESTER III)

Sl.No.	Course Code	Course Title	Credit Distribution				Marks		
			L	T	P	Total	IA	TE	Total
11	ECO/MJ/601	Agricultural Economics	3	1	0	4	20	80	100
	ECO/MJ-E/602	Industrial Economics	3	1	0	4	20	80	100
12	ECO/MJ-E/603	Population Economics	3	1	0	4	20	80	100
	ECO/MJ-E/604	Demography	3	1	0	4	20	80	100
13	ECO/MJ-E/605	Econometrics	3	1	0	4	20	80	100
	ECO/MJ-E/606	Infrastructural Economics	3	1	0	4	20	80	100
14	ECO/MJ-E/607	Economy of North-East India with Special Reference to Arunachal Pradesh	3	1	0	4	20	80	100

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	ECO/MJ-E/608	Rural Economics	3	1	0	4	20	80	100
15	ECO/MJ-E/609	Advanced Mathematical Analysis	3	1	0	4	20	80	100
	ECO/MJ-E/610	Labour and Informal Economics	3	1	0	4	20	80	100
Total			**20**				**500**		
FOURTH SEMESTER (SEMESTER IV)									
Sl.No.	**Course Code**	**Course Title**	**Credit Distribution**				**Marks**		
			L	**T**	**P**	**Total**	**IA**	**TE**	**Total**
16	ECO/MJ-E/611	Development Economics	3	1	0	4	20	80	100
	ECO/MJ-E/612	Gender and Development Economics	3	1	0	4	20	80	100
17	ECO/MJ-E/613	Regional Economics	3	1	0	4	20	80	100
	ECO/MJ-E/614	Institutional Economics	3	1	0	4	20	80	100
18	ECO/MJ-E/615	Economics of Social Sector	3	1	0	4	20	80	100
	ECO/MJ-E/616	Health Economics	3	1	0	4	20	80	100
19	ECO/MJ-E/617	Game Theory	3	1	0	4	20	80	100
	ECO/MJ-E/618	Advanced Econometrics Method and Application	3	1	0	4	20	80	100
20	ECO/MJ-E/619	Political Economy of East and South East Asia	3	1	0	4	20	80	100
	ECO/MJ-E/620	Entrepreneurial Development	3	1	0	4	20	80	100
Total Credit (Aggregate)								40	1000
Post-Graduate Degree in ECONOMICS with Coursework & Research on completion of courses equal to a minimum of 80 credits									

Note: L: Lecture; T: Tutorial; P: Practical; IA: Internal Assessment; TE: Term-End/Terminal Examination

**At the end of the semester, students must present an individual dissertation of at least 20,000 words based on their chosen research topic, which will be evaluated by internal and external examiners.*

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SEMESTER – I

ADVANCED MICROECONOMIC ANALYSIS
Course Code: ECO/MJ/501

Learning Objectives: This course is intended to acquaint the student in decision making in the context of market interdependence, complexity, uncertainty and information asymmetry; give insights into developments in the areas of general equilibrium and welfare economics; and to equip the students cater the Micro Economic theory to an advanced level.

Course Outcomes:
CO 1: The learner will learn about advance theory of utility maximization.
CO 2: They will understand the certainty and asymmetric information situation in decision making
CO 3: They will learn about the advance theory of firms.
CO 4: They will have further advance knowledge of welfare economics and general equilibrium.

Module I: Consumer's Choice
Value, utility and price of goods, utility maximisation, Duality of utility and expenditure, Marshallian demand function – Indirect utility function and cost function –Hicksian demand function – Properties of demand function: Engel aggregation, Cournot aggregation, homogeneity -Linear expenditure system.

Module II: Theory of Firms
The traditional theory of firm and its evaluation–Baumol's sales revenue maximization model: Static and dynamic model –Bian's Limit pricing theory, Marris's Model of Managerial Enterprise, Williamson's model of Managerial Discretion.

Module III: Welfare Economics and General Equilibrium
Pareto Optimality: Its conditions - consumption, production and exchange, critical evaluation of Pareto Optimality – compensation tests: Kaldor, Hicks and Scitovsky– Bergson's Social welfare function.
General Equilibrium: Uniqueness, Existence and Stability, Marshallian & Walrasian Equilibrium General Equilibrium system.

Module IV: Economics of Information and Uncertainty
Criteri under uncertainity, Risk and uncertainty: decision making criteria under risk, Expected Monetary value criterion, expected profit and value with perfect information, Expected Loss criterion; Decision making criteria under uncertainty, probabilities and Expected values, Attitudes towards risk and expected utility theory, Asymmetric information: adverse selection in lemon and insurance market, problem of moral hazard.

Suggested Readings:

- Kreps, David M. (1990), *A Course in Micro-Economic Theory*, Princet on University Press, Princeton
- Koutsoyiannis, A.(1979), *Modern Micro-Economics*,(2nd Edition, Macmillan Press, London
- Layard, P.R.G and A.W. Walters (1978),*Micro-Economic Theory*, McGraw Hill, New York
- Ray, N.C., *An Introduction to Microeconomic Theory*.

- Snyder(2014),*MicroeconomicsTheory:Basic Principles and Extension,* Cengage Learning Publishers.
- Sen, A.(1999),*Micro-Economics:Theory and Applications*, Oxford University Press, New Delhi
- Varian, H. (2000), *Micro-Economic Analysis*. W.W. Norton, New York
- Hirshleifer, J and A.Glazer (1997),*Prince Theory and Applications*, Prentice Hall of India, New Delhi
- Broadway, AR.S and N. Bruce(1984), *Welfare Economics*, Basil Blackwell, London
- Graff, J.DeV(1957),*Theoretical Welfare Economics*, Cambridge University Press, Cambridge
- Green, Hand V Walsh(1975),*Classical and Neo-Classical Theories of General Equilibrium*, Oxford University Press, London Pindyck, R. S. Rubuinfeld, D.L. & Mehta, P.L. *Microeconomics*, Pearson Education

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
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ADVANCED MACROECONOMIC ANALYSIS
Course Code: ECO/MJ/502

Learning Objectives: The learners will acquire knowledge of advance theories of Macroeconomics especially on classical, neo-classical and Keynesian synthesis and to study the macroeconomic policy challenges, such as consumption, investment, trade cycle, etc, of the economy in the light of the theoretical framework of economic studies.

Course Outcome:
CO1: The learners will understand the basics difference between the classical and Keynesian theories of income and employment.
CO2: The learners will acquire knowledge on the Keynesian synthesis under open economic framework.
CO3: The learner will be able to understand the alternate theories of consumption function.
CO4: The students gain knowledge on the advance theories of investment and trade cycles.

Module I: Classical and Keynesian Economics

Classical theory of income, employment, wage rate, interest and price level, Classical dichotomy and its critic, Say’s Law, Causes of unemployment: Evaluation of classical model. Keynesian critique of classical model, Keynesian Theory of income, consumption, interest, multiplier and employment.

Module II: Neo-Classical and Keynesian Synthesis

IS-LM model, Derivation of IS and LM curves, Relative effectiveness of monetary and fiscal policies, Extension of IS-LM model to an open economy: Mundell-Fleming model.

Module III: Theories of Consumption

Extension of Keynesian consumption function to long run, Fisher's intertemporal choice of consumption hypothesis, Relative income Hypothesis; Life Cycle Hypothesis; Permanent Income Hypothesis.

Module IV: Theories of Investment and Trade Cycle

Investment demand: Payback period, Present Value criterion for investment, Internal Rate of Return, Marginal Efficiency of Capital and Investment, Theories of trade cycle: Keynesian theory, Samuelson’s Multiplier-accelerator interaction and Schumpeterian theory.

Suggested Readings:

- Shapiro, Edward, Macroeconomic Analysis, Galgatia Publication, New Delhi, 1996.
- Branson, W. H., Macroeconomic Theory and Policy, Universal Book Stall, New Delhi, 1979.
- Kaldor, N., Essays on Economic Stability and Growth, Duckworth, London.
- Jha, R., Contemporary Macroeconomic Theory and Policy, New Age International (P) Ltd., New Delhi, 1999.
- Mueller, M.G. (ed.), Readings in Macroeconomics, Surjeet Publications, Delhi, 1978.
- Gampinski, J. H., Macroeconomic Theory, McGraw Hill, New York, 1982.
- Keynes, J. M., General Theory of Employment, Interest and Money, Macmillan, London, 1936.
- Frayen R.T., Macroeconomics: Theories and Policies, 8th Edition, Pearson Education, 2009
- Blanchard, O., Macroeconomics, fourth edition, Pearson Education, 2008

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- Mankiw, N. G, Macroeconomics, fourth edition, Worth Publishers, 1992
- Gordon, R.J. Macroeconomics, twelfth edition, PHI/Eastern Economy edition
- Parkin, M. Macroeconomics, tenth edition, Addison-Wesley Publishing Company, New York, 1989
- Friedman, M. (1957),*The Theory of Consumption Function*, Princeton University Press, Princeton.

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STATISTICS
Course Code: ECO/MJ/503

Learning Objectives: To improve understanding of the learners on the theoretical foundations of statistics required for analyzing the empirical relationships and estimations of economic variables; to enhance the knowledge of the students on probability and sampling distributions which are the key requirements for making statistical inferences.

Course Outcomes:

CO1: The learners will understand about the probability and mathematical expectation.

CO2: The learners will be able to learn about moment and some important probability distributions.

CO3: The learners will also learn about the correlation and regression analysis.

CO4: The learners will understand about the statistical inference.

Module I: Probability and Mathematical Expectation

The concept of a sample space & elementary events- Mutually exclusive events, dependent and independent events, compound events - a-priori & empirical definition of probability - addition & multiplication theorems - compound and conditional probability –Bayes theorem. Random variable, probability function and probability density function - expectation, variance, covariance, variance of a linear combination of variables, moments and moment generating functions.

Module II: Probability Distribution

Binomial, Poisson, Beta, Gamma and Normal distribution: Derivation of moments around origin and moments around mean – Standard normal distribution.

Module III: Correlation and Regression

Relationship between two variables – Karl Pearson's and Spearman's correlation coefficient, Regression – Estimation of two regression lines – Angle between two regression lines – Properties of regression coefficients – standard error of regression coefficients – Partial and multiple correlation and regression (concept).

Module IV: Statistical Inference

Properties of an ideal estimator - Concept of sampling distribution – χ^2 (Chi-Square), t and F distributions and their properties - Type I and type II errors, One tailed and two tailed tests – Testing of hypothesis based on Z, t and F distributions – Properties of an ideal estimator: unbiasness, efficiency and consistency.

Suggested Readings:

- Giri, Prasanta Kumar and Jiban Banerjee, *Introduction to Statistics including statistics practical*, Academic Publishers, 2009
- Gupta, S. C., *Fundamentals of Applied Statistics*, S. Chand and Sons, New Delhi, 1993.

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- Goon, A M., M.K. Gupta and B.S. Dasgupta, *Basic Statistics*, The World Press Limited, Calcutta, 1996.
- Goon, A M., M.K. Gupta and B.S. Dasgupta, *Fundamentals of Statistics*, Vol. I and Vol. II, The World Press Limited, Calcutta, 1996.
- Gupta, S.P., *Statistics*, S. Chand, New Delhi, 1997.
- Gupta, S.C. and V.K. Kapoor, *Fundamentals of Applied Statistics*, S. Chand and Sons, New Delhi, 1993.
- Hogg, R.V. and A.T.Craig, *Introduction to Mathematical Statistics*, Macmillan Publishing Co., New York, 1970.
- Kapoor, J.N. and H.C. Saxena, *Mathematical Statistics*, S.Chand & Company, New Delhi, 1992.
- Millar, J., *Statistics for Advanced Level*, Cambridge University Press, Cambridge, 1996.
- Nagar, A.L. and R. K. Das, *Basic Statistics*, Oxford University Press, New Delhi, 1993.

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GROWTH AND DEVELOPMENT ECONOMICS

Course Code: ECO/MJ/504

Learning Objective: The students are oriented towards the problems of the developing countries-especially, those issues which act as powerful obstacles in the path of development. Major growth and development models are also included in this paper.

Course Outcomes:
CO1: The learners will have the basic idea of the Keleckian and Keynesian frame and the basic neoclassical growth models.
CO2: The learners will be able to understand the neoclassical critiques and the emergence of the Cambridge growth accounting.
CO3: The learners will also have the idea and working knowledge about the most recent development in the endogenous growth models.
CO4: The learners will understand the influence and consequences of technology transfer and growth convergence.

Module I: Models of Economic Growth

Classical growth theories - Smith, Ricardo & Malthus; Domar and Harrod model, Basic neoclassical growth: Solow model- Steady state of equation, Golden rule of accumulation; Solow residure.

Module II: Technical Change and Endogenous Growth

Hicksian and Harrodian versions of neutral technical progress- Labour and capital augmenting technical progress (Harrod and Solow versions)- Disembodied and Embodied technical progress-Exogenous and Endogenous; Romers's Endogeneous growth model.

Module III: Theories of Underdevelopment

Economic growth and economic development- measurement of economic development- Problems in measure of development- Human Development Index (HDI) - Obstacles to economic development. Vicious circles of poverty and its critique, Nelson's low level equilibrium trap, Myrdal's theory of cumulative causation.

Module IV: Approaches to Economic Development

Traditional approach to development: Balanced Vs Unbalanced growth, Balance growth theory-Rosenstein-Rodan's theory of big push - Nurkse's model, Unbalanced Growth theory- Hirschman's theory - Lewis model - Ranis - Fei model.

Suggested Readings:

- Sen, A.(Ed), *Growth Economics*, Penguine, Harmonds worth,1990.
- Adelman, J.,*Theories of Economic Growth and Development*, Stanford University Press, 1961.
- Domar, E.D., *Essays in Theory of Economic Growth*, Oxford University Press, New York.
- Kaldor., *Essays on Economic Stability and Growth*, Duckworth, London,1980.
- Solow ,R.M., *Growth Theory: An Exposition*, Oxford University Press,2000.

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- Thirwal, A.P.,*Growth and Development*, Macmillan, London,1999.
- Meier,G, *Leading Issues in Economic Development*, Oxford University Press, New Delhi, 1990.
- Higgins, B., *Economic Development*, W.W. Norton, New York,1959.
- Todaro, M.P., *Economic Development*, Longman, London,1996.
- Myrdal,G., *Economic Theory and Underdeveloped Regions*, Duckworth, London,1957.
- Ray, D. *Development Economics*, Oxford University Press.
- UNDP, *Human Development Reports*, Oxford University Press.

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Department of Economics
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RESEARCH METHODOLOGY

Course Code: **ECO/MJ/505**

Learning objective: The Research methods paper and the various techniques in the paper are required to understand specific economic situation of empirical world. Hence, this course is design for the students such that they can take up the work of Dissertation writing smoothly in their graduation level with empirical data and information.

Course Outcome:

CO1: The learners can able to understand the meaning, types and objectives of doing Research in Economics.

CO2: The learners can able to understand the meaning and types sampling design. The learners also able to identify the different sources of data for their research.

CO3: The learners can able to do some simple analysis after collection of data and also interpret the results also.

CO4: Learners can able to set the hypothesis for their research and also the testing of Hypothesis can be using suitable statistical techniques

Module I: Meaning of Social Science Research

Meaning of Research – Social Science research and its Objectives – Types of Research in Social Sciences: Participant Observations, Action research, Community based research; quantitative and qualitative research, Research Design, research in Economics andits problems, Identification of the economic problem to be researched – literature review.

Module II: Sample Design and Data Source:

Sample Design – Meaning and Types, Implication of Sample Design, Steps and Characteristics of Good Sample Design, Criteria of selecting a sampling procedure; sampling problems: heterogeneity oftheuniverse,Stratificationoftheuniverse, Data Source – Secondary and primary– preparation of questionnaire.

Module III: Hypothesis Testing

Meaning of Hypothesis, Basic Concept concerning the testing of hypothesis, Procedure of Hypothesis Testing, Types of Errors in Hypothesis Testing; two tailed and one-tailed; Z test, t test, chi square test and F test.

Module IV: Processing and Analysis of Data using Statistical software

Analysis of Data using Excel and SPSS; Creation of Graphs, Tables, Bar Diagram, Mean, Median and Mode, Standard Deviation, Measures of Dispersion, Simple Regression analysis

Head/विभागाध्यक्ष
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Arunachal Pradesh University
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Suggested Readings:

- Freund, J. E. (2003). Mathematical Statistics with Applications (7th ed.). Irwin Miller &Marylees Miller. Prentice Hall.
- Gupta, S. C. (2012). Fundamentals of Statistics. Himalaya Publishing House.
- Hogg, R. G., & Craig, A. T. Introduction to Mathematical Statistics. Pearson Education (Indian Edition).
- Kenny, J. F., & Keeping, E. S. Mathematical Statistics, Part I & Part II.
- Kothari, R. C. (2008). Research Methodology, Methods and Techniques (2nd rev. ed.). New Age International Publishers.
- Krishnaswamy, O. R. (1993). Methodology of Research In Social Sciences. Himalaya Publishing House.
- Rohatgi, V. K., & Saleh, A. K. M. E. (2000). An Introduction to Probability and Statistics (2nd ed.). Wiley.
- Wilkinson, T. S., & Bhandarkar, P. L. Methodology and Techniques of Social Research. Himalaya Publishing House.

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SEMESTER II

INDIAN ECONOMY

Course Code: **ECO/MJ/551**

Learning Objective: India economy has undergone a great change in so far as the basic mode of its operational techniques is concerned. Among other things, it has called for change in the syllabus to keep pace with emerging realities. This course also intended to overview the basic characteristics of the North Eastern India and the pace of economic development with the various initiatives taken for it. It tries to present various challenges faced in this region on the development of agriculture, industries and infrastructures; and the problems of migration.

Course Outcome:

CO1: The students can able to understand on the economic problems at national level - national income, employment and price behaviour and untapped opportunities in the region are enhanced.
CO2: The learners can able to understand the problems and prospect of agriculture and industry.
CO3: The learners can able to understand the problems and prospect of agriculture and industry North East India.
CO4: The learners can able to understand the impact of migration and infrastructural development.

Module I: National Income, Employment and Price Behaviour

National income–Trends in growth and structure, performance of different sectors. Employment and unemployment: Recent trends and estimates–Labour market reforms-Inflation: Recent trends in prices and its causes. Impact of the Covid19 pandemic on the Indian Economy; Employment, prices, Labour Market and migration.

Module II: Agriculture and Industry

Agricultural performance: Growth and productivity-Economic reforms and their impact on agriculture - Agricultural policy - Institutional reforms. Technological Change in Agriculture; Terms of Trade Between Agriculture and Industry; Agricultural Marketing and Warehousing; Evolution of Indian industries: An overview–Evaluation of industrial policies of 1948 and 1956–PSUs: Performance and shortcomings–PSUs and is investment debate-Economic reforms and industry.

Module III: Public Finance

Sources of public revenue and types of expenditure; Concepts of Revenue deficit and Fiscal deficit; Trends in revenue and expenditure of Government of India, deficit financing and price bheviour in India: consequences and policy suggestions, Finance Commission of India, NITI Ayog, Centre-State financial relations.

Module IV: Economic Reforms in India and Balance of Payment

Concept of globalisation, Rationale for economic reforms, Banking and Financial sector reforms (Narasimham Committee Recommendations), characteristic of tax reform and its impact on economic growth, trend and growth of FDI in India, India's balance of payment position, WTO and India.

Suggested Readings:

- Agarwal, A.K.(1987):*Economic Problems and Planning in North East India*, Sterling Publishers.
- Alam, K.(ed.)(1993):*AgriculturalDevelopmentinNorthEastIndia:Constraintsand Prospects*, Deep and Deep, ND.
- Banerjee and Kar(1999):*Economic Planning and Development of North-Eastern States*, Kanishka, ND.
- DuttaandKarna(eds.)(1987):*LandRelationsinNorthEastIndia*,People'sPublishing House, ND.
- Maithani, B.P.(1997):*LocalSelf-GovernmentinNorth-EastIndia:AnAppraisal*,NIRD, Hyderabad.
- Menon, S.(ed.)(2007):*India's North East Economy- Problems and Prospects*, ICFAI Univ. Press, Hyd.
- Mishra, B.(2006):*Fiscal Policyin North-East India*, Akansha Publishing House, ND.
- VisionDocument2020, NEC, Shillong.www.necouncil.nic.in

Head/विभागाध्यक्ष
Department of Economics
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Hill Top Pasighat (A.P) 791103

PUBLICE ECONOMICS
Course Code: ECO/MJ-E/552

Learning Objectives: The learning objective of this paper is to impart to the students a thorough understanding of the government policies through the study of their theoretical foundations; public expenditure, taxation, public budget as well as the role of fiscal policy and fiscal federalism.

Course Outcome:
CO1: The learners will gain knowledge about rationale behind government intervention,
CO2: The learners will also learn about the theories and importance of public expenditure and its effects.
CO3: The learners will know about the sources of public revenue and gain skills to analyse the different components of public budget.
CO4: The learners will also understand about the fiscal policy and its role in maintaining economic stability.
CO5: the learners will gain fair knowledge about centre-state fiscal relation in a federal country

Module 1: Rationale for Government Intervention

Role of government in economic activity: Allocation, distribution and stabilization functions, Musgrave' optimum budget model – demand and supply of Public goods, Externalities and market failure, causes of market failure in public goods, rationale for government intervention in provision of public and merit goods.

Module II: Theories of Public Expenditure

Reasons for growth of public expenditure, Wagner's law of increasing state activities – Wiseman-Peacock hypothesis, Lindhal's model – Samuelson's model – Paradox of voting in public expenditure.

Module III: Theories of Taxation and Public Debt

Ability to pay and benefit approaches of taxation; neutrality in taxation, theories of excess burden, Taxable capacity- absolute and relative and its determinants, shifting and incidence of tax under monopoly and oligopoly. Public debt, burden of debt-money burden and real burden, Domar's approach to burden of public debt, management of public debt.

Module IV: Fiscal Policy and Federalism

Fiscal policy and its instruments, compensatory fiscal policy, balanced budget multiplier, Deficit financing: advantages and disadvantages. Fiscal federalism-Principles of division of financial resources in a federation – Horizontal and vertical imbalances – Role of Finance Commission in funds transfer from Centre to the States in India – Fiscal reforms in India.

Suggested Readings:

- Musgrave, R.A., The Theory of Public Finance, McGraw Hill, Kogakhusa, Tokyo, 1959.
- Musgrave, R.A and P.B. Musgrave, Public Finance in Theory and Practice, McGraw- Hill Book Company.
- Buchanan, J.M., The Public Finances, Richard D Irwin, Homewood, 1970.
- Dalton, H., Principles of Public Finance, Allied Publishers, New Delhi.
- Atkinson, A.B. and J.E. Stiglitz, Lectures on Public Economics, Tata McGraw Hill, New York.
- Choudhry, R.K., Public Finance and Fiscal Policy, Kalyani Publishers, New Delhi.
- Jha, R., Modern Public Economics, Routledge, London.
- Mishra, B., Economics of Public Finance, Macmillan India Limited, New Delhi.
- Gupta, J.R., Public Economics in India, Atlantic Publications, 2007.

Head/विभागाध्यक्ष
Department of Economics
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POLITICAL ECONOMICS
Course Code: ECO/MJ-E/553

Course Objective: This course has been designed to impart knowledge of the economic ideas and economic thoughts of Indian economic thinkers.

Course Outcome:

CO1: The learners will learn about the economic ideas and thoughts of political economy.

CO2: They will acquire knowledge about the ancient Indian economic thinkers.
CO3: The learners will also know about the Indian economic thoughts during the colonial period and learn about drain of wealth and causes of famine and poverty.
CO4: The learners will have learned about the economic thoughts in modern India relating to fiscal policy, economic planning, population policy, national income and income tax in India.

Module I: Introduction to Political Economy

Concept and development; Theories of political economy—Adam Smith, Ricardo and Marxism; Perspective to Political Economy—Mercantilism, Liberalism, Welfarism, Neo Liberalism and Gandhian; Indian perspective—Philosophy of mixed economy and democratic socialism.

Module II: Economic Thoughts in Ancient India

Kautilya's Arthashastra: Varta (National Economy), Importance of agriculture, animal husbandry and trade; Ideas on population growth and slavery; Economic functions of State; Public Finance; Town planning and social security.

Module III: Economic Thoughts during Pre-independence period

Dadabhai Naroji: Taxation, military expenditure and public debt; drain theory; Economic Ideas of Ranade; Gandhian views; Wacha's idea on causes of famine and currency policy; Ramesh Chandra Dutta's idea on causes of poverty and remedies; Gopal Krishna Gokhale's idea on public expenditure and financial reforms

Module IV: Economic Thoughts in Modern India

Radhakamal Mukherjee: Institutional theory of economics, planning in India; Ecological theory of population; C. N. Vakil: Fiscal policy and financial development in India; Gadgil: Industrial evolution, war and economic policy and planned economic development; V.K.R.V Rao: national income of India, income tax in India, war-time and post-war economic policies, deficit financing and economic development, dealing with post-devaluation problems.

Suggested Readings:

- Dasgupta, Ajit K., A History of Indian Economic Thoughts, Routledge, 1993.
- Sen, Amartya, The Argumentative Indian: Writings on History, Culture and Identity, 2006.
- Caporaso, J.A. & Levine D.P. (1992). *Theories of Political Economy.* Cambridge: Cambridge University Press.
- Frieden, J.A. & Lake, D.A. (2003). International Political Economy: Perspective on Global Power and Wealth. New York: Routledge.
- Conlin, Jonathan, Great Economic Thinkers: From Adam Smith to Amartya Sen, Speaking Tiger

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Publishing Ltd., 2018.
- Lokanathan, V., History of Economic Thought, S. Chand & Company Limited, 2010.
- Hajela, T.N., History of Economic Thought, Ane Books.
- Paul, R.R., History of Economic Thought, Kalyani Publisher, 2014.

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Department of Economics
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INTERNATIONALECONOMICS
Course Code: ECO/MJ-E/554

Learning Objective: In the age of globalization, International Economics is very important. Students will learn about the advance theories of international trade and development.

Course Outcome:

CO1 The learners will know about new theories like trade under imperfect competition
CO2 They will know about the market trade and technological change and role of natural resources in the development of the nations in the context of Dutch Disease
CO3 They will learn about basics concepts BoP, Capital account convertibility and formation of regional trade blocs
CO4 They will learn about the regional integration and its role in trade.

Module I: Theory of International Trade

Theory of Absolute, comparative cost advantage - Modified Ricardian model: Haberler's opportunity cost theory - trade under imperfect competition: Intra-industry trade, Product Life Cycle.

Module II: Trade and Technological Change

Technical change and international trade: Neutral, capital saving and labour-saving technical progress and their impact on terms of trade. Natural resource and Dutch disease – technological progress, human capital and increasing return, an overview of endogenous growth models and its evaluation.

Module III: Theories of Regional Block and Balance of Payment

Theories of Regional trade Block, Evolution of European Union, BREXIT, Optimum Currency area, SAPTA, SAFTA and BRICS - Components of balance of payment, Relative importance of current and capital Accounts; convertibility - Foreign Trade Multiplier.

Module IV: Trade Policy as input to Transition, Development and Integration

Regionalism and multilateralism, extent of regionalism: coexistence and conflicts, developing countries: growth crisis and need for reform, trade as input to development, transition and liberalization, theory of economics integration, effects of integration and the basic methods.

Suggested Readings:

- Mannur, H.G, *International Economics*, Vikash Publishing House,1983.
- Kindleberger, C.P. *International Economics*, R.D. Irwin, Homewood,1991.
- Soderston, Bo, *International Economics*, The Macmillan Press Ltd., London,1991
- Salvator, D, *International Economics*, Prentice Hall, Upper Saddle River, N.J. New York, 1997.
- Bhagwati, J.(Ed.),*International Trade: Selected Readings*, Cambridge University Press, Massachusetts, 1981
- Viner, Jacob, *Studies in the Theory of International Trade*, Harper and Row, New York
- Grable, J.O., *International Financial Markets,* Prentice Hall, New York,1996.

- Meade, J.E, *Theory of International Economic Policy*, Oxford University Press, London,1968.
- Meier,G.M., *The International Economics of Development*, Harper Androw, New York, 1968.
- Markandya A and Harou Patrice, *Environmental Economics for Sustainable Growth*, Edward Elger, USA, 2002.
- Pearce, D W, *Environmental Economics*, Longman, London, 1992.

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BEHAVIOURAL ECONOMICS
Course Code: ECO/MJ-E/555

Course Objective: The objectives of the course is to understand why people make economically irrational decisions. Behavioural economics uses psychological experimentation to develop theories about human decision making.

Course Outcomes:
CO1: The learners will acquire knowledge about the interaction between Economics and economics in making market transactions
CO2: The leaners will understand the notions of bounded rationality in optimizing Behaviour of consumer and the firms.
CO3: The irrational behaviour of economic agents will be understood by the learners through the behavioural game theory
CO4: The learners will be able to learn the firms' reactions to behavioural consumer and behavioural finance in terms of market efficiency.

Module I: Introduction and Reference-Dependent Preferences

Themes in Economics- Illustration through examples; Kahneman/Tversky classic experiments; Prospect theory; Market implications: labour supply, marketing, industrial organization

Module II: Choice Over Time and Bounded Rationality
Samuelson's exponential-discounting; Self-control and hyperbolic discounting; Harmful substances and government policy; Anxiety, optimism & anticipation; Misperception of utility; Heuristics and biases; Views of bounded rationality

Module III: Behavioral Game Theory and Social Preferences

Game theory & behavioral game theory; Irrational players and equilibrium; Classic experiments; "Distributional" and "intention" models; Labor markets: wage setting and unemployment

Module IV: Firms' Reactions to Behavioral Consumers and Behavioural Finance
The pricing of credit cards and mortgages; Shrouded attributes; Principles for intervention.
Arbitrage and limits thereof; Market efficiency and economic efficiency; Small investors

Suggested Readings:

- Nick Wilkinson and Matthias Klaes, *An Introduction to Behavioral Economics.*
- Daniel Kahneman, *Thinking Fast and Slow.* 45
- Ariel Rubinstein, Modelling Bouded Rationality, MIT Press 1998
- David Just, Introduction to Behavioural Economics.
- Colin Camerer, George Loewenstein and Matthew Rabin, Advances in Behavioural Economics.
- John Kagel and Alvin Roth, The Handbook of Experimental Economics.
- Richard Thaler, The Winner's Curse.

- Richard Thaler and Cass Sunstein, Nudge: Improving Decisions about Health, Wealth and Happiness.
- Dan Ariely, Predictably Irrational: The Hidden Forces That Shape Our Decisions.
- Richard H Thaler, Misbehaving: The Making of Behavioural Economics.
- Steven D Levitt and Stephen J Dubner, Freakonomics: A Rogue Economist Explores the Hidden Side of Everything, Kindle Edition.

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FINANCIAL INSTITUTIONS
Course Code: ECO/MJ-E/556

Learning Objectives: This course intends to enhance the understanding of the students on the framework and working of financial markets. Knowledge of students on financial market and its instruments is enhanced, and understand the role regulation institutions.

Course Outcome:

CO1: Financial architecture of an economy and its key players
CO2: The fabrication of Indian Financial markets
CO3: Students will learn about Indian financial system
CO4: Functioning of different regulatory authorities and international financial history which includes Bretton woods system and Eurocurrency market

Module I: Indian Financial System and Major Institutions

Structure of Indian Financial System: An overview of the Indian financial system, major reforms in the last decade: Payment banks, GST, monetary policy, Insolvency and Bankruptcy code; issues in financial reforms and restructuring; future agenda of reforms.RBI, SEBI,IRDA,PFRDA, Corporate Governance, commercial bank and SEBI.

Module II: Financial Markets in India

Introduction to Financial Markets in India: Role and Importance of Financial Markets, Factors affecting Financial Markets, Integration of Indian Financial Markets with Global Financial Markets, Mutual Fund: types of Mutual Funds, Credit Rating Agencies: Role and mechanism, Merchant Bank: role and types, Venture Capital Funds concept, stages of investment, exit options; Private Equity. Foreign Exchange Market: Foreign Capital – FDI & FII

Module III: Money Market and Capital Market in India

Indian financial system–structures and functions. Types of Financial Markets: Money & Capital markets–features & constituents, instruments- Call money market; Treasury bill market; Repo market, Reverse repo market, Derivative market, Government securities market, Market for Commercial Paper, Commercial Bills and Certificate of Deposit.

Module IV: Regulatory Institution, Foreign Exchange and International Financial History
Security and Exchange Board of India (SEBI) – emergence, objectives, functions, power. General features and Working of Foreign Exchange Market; Currency Convertibility; Rise and fall of the Bretton woods system; History, nature and recent development of Euro and Eurocurrency market.

Suggested Readings:

- Bhole, L.M (2009), Financial Institutions and Markets: Structure, Growth and Innovations, Tata Mc Graw Hill Company Ltd., New Delhi
- Bhole,L.M (2000),Indian Financial System, Chugh Publications, Allahabad
- Edminster, R.O (1986), Financial Institutions, Markets and Management, McGraw Hill New York.
- Gomez, Clifford (2015), *Financial Markets, Institutions and Financial Services,* PHI

Learning Pvt. Ltd., New Delhi.

- Khan,M.Y(1996),Indian Financial Systems, Tata McGraw Hill, New Delhi
- Machiraju, H.R(1999), Indian Financial Systems,Vikas Publishing House, New Delhi
- Machiraju, H.R(1997), International Financial Markets and India, New Age Publication.
- MauriceD.Levi(2009), International Finance, Routledge, NewYork.
- Pathak, B. Indian Financial System (4th ed). Pearson Publication

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
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AGRICULTURAL AND RURAL DEVELOPMENT
Course Code: ECO/MJ-E/557

Learning Objectives: It is attempted to impart thoroughly the conceptual backgrounds on the study of agricultural economics. This will help the students' understandings while exposing themselves to the real-world situation of agricultural developments and problems.

Course Outcomes:
CO 1: The learner will learn about agriculture and economic development.
CO 2: They will understand the agricultural growth in India.
CO 3: They will learn about the land reforms
CO 4: The learner will learn about the rural finance and role of cooperatives

Module I: Agriculture & Economic Development

Nature & Scope of Agricultural and Rural Economics; Traditional Agriculture and its Modernisation –Schultz's Thesis; role of Agriculture in Economics Development, Interdependence between Agriculture and Industry.

Module II: Agricultural Growth in India

Shifts in Cropping Pattern. Prospects & Problems of Agricultural Growth in India; Supply of Inputs – Irrigation, Power, Seed and fertilizers; Pricing of Inputs and Role of Subsidies; Sustainable Agriculture – Indigenous Practices; Bio-technological Practices and Growth Potential.

Module III: Land Reforms

Land tenures and Farming Systems – Peasant, Capitalist, Collective and State Farming share; Tenancy and Crop sharing – Forms, Incidence and Effects; Land reform measures and performance; Problems of marginal land and small farmers

Module IV: Rural Finance & Role of Cooperatives

Role of Rural Credit – Characteristics and Sources of Rural Credit – Institutional and Non-Institutional Credit; Reorganization of Rural credit – cooperatives; commercial banks, Regional Rural Banks; Role of NABARD; Co-operative Movement; Agricultural C-operation in India: Problems and Prospects of Co-operative Institution.

Suggested Readings:

- Alternative Economic Survey, Rainbow/Zed Publishers, New Delhi
- Bhardan (1984), Land, Labour and Rural Poverty, OUP, ND
- Bhaduri, A. (1984), The Economic Structure of Backward Agriculture, Mc Millan, Delhi
- Bilgrami, S.A.R (1996), Agricultural Economics, Himalaya Publishing House, Delhi
- Dantwala, M.L et.al (1991), Indian Agricultural Development Since Independence, Oxford & IBH, New Delhi.
- Government of India, Economic Survey (Annual), New Delhi
- Gulati, A and T Kelly (1999), Trade Liberalisation and Indian Agriculture, Oxford University Press, New Delhi
- Kohlon, A.S and Tyagi D.S (1983) Agriculture Price Policy in India, Allied Publishers, New

Delhi

- Rao, C.H Hanumantha (1975), Agricultural Growth, Rural Poverty and Environmental Degradation in India, Oxford University Press, New Delhi
- Rudra, A. (1982), Indian Agricultural Economics: Myths and Reality, Allied Publishers, New Delhi
- Sasini, GR. (1979), Farm Size Resource Use Efficiency and Income Distribution, Allied Publishers, New Delhi
- Chaudhary, P. (1972), Readings in Indian Agricultural Development, George Allen & Unwin, London.
- Ghatak, S and K Ingerscent (1984) Agriculture and Economic Development, Select books, New Delhi.
- Raj K.N et.al (1988), Essays in the Commercialization of Indian Agriculture, Oxford University Press, New Delhi.
- Popola, T.S (1982), rural Industrialisation in India, Himalaya Publishing House Bombay

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
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RESEARCH AND PUBLICATION ETHICS
Course Code: ECO/MJ/558

Learning Objectives:
To make the research scholars aware about the research and publication ethics, and publication misconducts.

Course Outcome:

CO1: Students will know about basic concepts of philosophy and different branches of philosophy.
CO2: The outcome of the course is to acquaint the research Scholars about the research and publication ethics
CO3: They will be informed about publication misconduct and violation of publication ethics.
CO4: They will be informed about predatory publishers and journals.

Module I: Philosophy and Ethics

Introduction to western philosophy: definition, nature and scope, concept and branches; Branches of Indian philosophy- their main ideas.
Ethics: definition, moral philosophy, nature of moral judgements and reactions.

Module II: Ethics in Economics

Adam Smith and the study of ethics; Sen's view on ethics in economics; Ethics and sustainable economy.

Module III: Scientific Conduct

Ethics with respect to science and research; Intellectual honesty and research integrity; Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP), Redundant publications: duplicate and overlapping publications, salami slicing; Selective reporting and misrepresentation of data.

Module IV: Publication Ethics and Misconduct

Publication ethics: definition, introduction and importance; Best practices/ standards setting initiatives and guidelines: COPE, WAME, etc.; Conflicts of interest.
Publication misconduct: definition, concept, problems that lead to unethical behaviour and vice versa, types; Violation of publication ethics, authorship and contributor ship; Identification of publication misconduct, complaints and appeals; Predatory publishers and journals.

Suggested Readings:

- Beall, J. (2012). Predatory publishers are corrupting open access. Nature, 489(7415), 179-179. https://doi.org/10.1038/489179a
- Bird, A. (2006). Philosophy of Science. Routledge.
- Carlos, C. M. (2000). Intellectual property rights, the WTO and developing countries: the TRIPS agreement and policy options. Zed Books.
- Chaddah, P. (2018). Ethics in Competitive Research: Do not get scooped; do not get plagiarized. ISBN: 978-9387480865.
- Indian National Science Academy (INSA). (2019). Ethics in Science Education, Research and Governance. ISBN: 978-81-939482-1-7. http://www.insaindia.res.in/pdf/EthicsBook.pdf
- Macintyre, A. (1967). A Short History of Ethics. London.
- National Academy of Sciences, National Academy of Engineering, and Institute of Medicine. (2009). On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition. National Academies

Press.

- Resnik, D. B. (2011). What is ethics in research & why is it important. National Institute of Environmental Health Sciences, 1-10.
- Satarkar, S. V. (2000). Intellectual property rights and Copy right. EssEss Publications.
- Wadehra, B. L. (2000). Law relating to patents, trademarks, copyright designs and geographical indications. Universal Law Publishing.
- White, M. D. (Ed.). (2019). The Oxford Handbook of Ethics and Economics. Oxford University Press.

SEMESTER III

AGRICULTURAL ECONOMICS
Course Code: ECO/MJ/601

Learning Objective: This paper has been designed to provide theoretical and analytical knowledge of Agricultural Economics to the students and also to provide them insight into the issues of Indian agriculture in the changed global scenario.

Course Outcome:

CO1. The learners will understand about the nature of Agricultural Economics, measures of farm efficiency, farm mechanization, agricultural production function, and supply response models.
CO2. They will also learn about the various theories of agricultural development.
CO3. The learners will also learn about the issues related to agricultural finance and agricultural marketing.
CO4. The learners will acquire knowledge in issues in agricultural development in India, issues related to new technology, food security issue, WTO and Indian agriculture.

Module I: Introduction to Agricultural Economics and Farm Management

Nature of Agricultural economics - Interdependence and complementarities between agriculture and industry - Farm efficiency measures - Farm mechanization.
Nature of agricultural production function: Spillmans, Cobb-Douglas type, price expectation and Cobweb theorem - Nerlove's model - Marketed and marketable surplus - Mathur-Eizkel hypothesis.

Module II: Theories of Agricultural Development

Problems of labour surplus economy: Lewis' model and Jorgenson's models – Theories of agricultural development: Schultz and Mellor - Farm household models: Chayanov, Barnum-Squire and Low's models – Share tenancy: Marshall and Cheung models

Module III: Agricultural Finance and Marketing

Rural credit market: Lenders' risk hypothesis, monopolistic credit market –Sources of agricultural finance: Cooperative credit society, Commercial banks, Regional rural banks and NABARD –Microfinance - Rural credit policy.
Agricultural marketing in India – Cooperative marketing – Government measures to improve the system of agricultural marketing.

Module IV: Issues in Agricultural Development in India

New technology and its impact on output, employment and income distribution, Problems of diffusion of new technology - Food security and PDS – Agricultural subsidies and price policy – Public investment in agriculture – National agriculture policy - WTO and Indian agriculture: Agreement of Agriculture (AoA), Sanitary and Phyto-sanitary measures and their implications.

Suggested Readings:

- Heady, E.O., Economies of Agricultural Production and Resource Use, Prentice Hall.
- Heady, E.O. and J. Dhillon, Agricultural Production Functions, Kalyani Publishers, New Delhi.
- Ellis, Frank, Peasant Economics: Farm Household and Agrarian Development, Cambridge University Press.

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
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- Foster, G.W. and M.C. Leoger, Elements of Agricultural Economics, Prentice Hall.
- Bardhan, P.K., Interlocking Factor Markets and Agrarian Development: A Review of Issues, Oxford Economic Paper, Vol- 32, No., 1980.
- Bardhan, P.K., Land, Labour and Rural Poverty, Oxford University Press, 1984.
- Basu, K., The Less Developed Economy: A Critique of Contemporary Theory, Oxford University Press, 1984.
- Basu, K., Analytical Less Developed Economy, Oxford University Press.
- Bhaduri,A., Unconventional Economic Essays, Oxford University Press, 1993.
- Mishra S.K and V.K Puri, Indian Economy, Himalayan Publishing House (latest edition).
- Soni, R.N, Leading Issues in Agricultural Economics, Vishal Publishing Co. (Latest edition).
- Srivastav, O.S, Theories and Policy of Agricultural Economics, Anmol Publications Pvt. Ltd. 2010.

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
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INDUSTRIAL ECONOMICS
Course Code: ECO/MJ-E/602

Learning Objectives: Students will be able to industrial organization & it provides a foundation for the study of many other fields related to industry. Students will be able to understanding an interactions among firms in the economy, including business strategy, corporate finance, marketing, international trade, banking, and the economics of organizations. It provides an overview of the historic evolution of industrial economies while focusing on recent developments in the study of firms' behavior.

Course Outcomes:

CO1: Students should be able to Identify and understand different market structures and their decisions on price and output.
CO2: Students should be able to Understand about the determinants of Industrial Location**.**
CO3: Students should be able to understand the Implications of Investment, Research, Development & Innovation in Industry
CO4: Students should be able to understand different market structure.

Module I: Introduction

Meaning and Scope of Industrial Economics, Need and Significance of The Study of Industrial Economics, Agricultural Development and Industrialization, Factors Affecting Industrial Development. Industrial Decisions - Market Structure Competition or Co-Operation. Firm Behavior & Market Outcomes, Cartel, Collusion, Merger.

Module II: Industrial Location Analysis

Meaning of Industrial Location, Determinants of Industrial Location, Weber’s & Florence’s Theories of Industrial Location

Module III: Investment, Research, Development & Innovation in Industry

Investment Decisions - The Nature & Types of Investment Decisions, Preparation of the Profile of a Project , Pricing Methods of Project Evaluation , Risk and Uncertainties in Project Appraisal, Research, Development and Innovation - Meaning, R & D Expenditure as an Investment Decision, The Relationship between R & D, Inputs & Outputs; Rationalization & Automation- Meaning & Objectives, Benefits, Problems & Policy.

Module IV: Price and Non-price Competition

General Situation for Pricing Decisions, Pricing Under Perfect & Imperfect Competition: in theory, Pricing Procedures in Practice, Pricing Methods., Pricing in Public Enterprises, Price Wars: Theories and Evidence. Meaning of Non-Price Competition& Product Differentiation, Horizontal Product Differentiation, Brand Proliferation as an Entry Deterrence Strategy, Vertical Product Differentiation, Price Discrimination: First- Second-& Third Degree Price Discrimination.

Suggested Readings:

- Ferguson, Paul R. and Glenys J. Ferguson, (1994), Industrial Economics - Issues and Perspectives, Macmillan, London.
- Shepher, William G. (1985), The Economics of industrial Organization, Prentice - Hall, Inc, Englewood Cliffs, N. J.
- Staley, E & Morse R. (1965), Modern Small Industry for Developing Countries, McGraw Hill Book Company.
- Elizabeth E. Bailey William J. Baumol: Deregulation and the Theory of Contestable Markets,1984, Volume 1 Issue 2 Yale Journal on Regulation.
- Reza Aboutalebi: The Taxonomy of International Manufacturing Strategies, Surrey Business School, University of Surrey, Guildford, UK ,
- Joe Chen 111 8.4 A taxonomy of business strategies Lecture Notes: Industrial Organization,
- G. Symeonids: Industrial Economics ,2011, London School of Economics & Political Science,
- Ahluwalia, I. J. (1985), Industrial Growth in India - Stagnation since Mid-sixties, Oxford University Press, New Delhi.
- Ahluwalia, I. J. (1991), Productivity and Growth in Indian Manufacturing, Oxford University Press, New Delhi.
- 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.
- Vepa R. K. (1988), Modern Small Industry in India, Sage Publications.

POPULATION ECONOMICS
Course Code: ECO/MJ-E/603

Course Objective:

The demographic behaviour is highly complex in view of its being enmeshed in the socio-cultural matrix of the society. However, the process of industrialization and urbanization tend to reduce the strength of traditional mores and values of the society. This results in the steady growth of market relations and use of cost-benefit analysis in decision making process. The application of economic theory to the study of population is not only relevant but also useful, so population economics is included.

Course Outcomes:

CO1: The learners will acquire knowledge about Population growth and the various theories of fertility.

CO2: The learner will also learn about the various measures of mortality and how to construct a life table.

CO3: They will acquire knowledge on issues related to migration and urbanisation and how they impact population.
CO4: The learners will have a better understanding about the growth and projection of population and the evolution of the population policy of India.

Module I: Population Growth and Fertility
Trends of population growth since the beginning of 20th century; basic measures of demography: rates and ratios; data sources: census, surveys and vital statistics. Measures of fertility: CBR, GFR, TFR, cumulative fertility rate, child women ratio, gross and net reproduction rates; determinants of fertility: Malthusian view and its shortcomings; social mobility and fertility: Dumont's social capillarity theory; economic models: Easterlin's and Becker's theories of fertility and their critical evaluation.

Module II: Mortality
Basic measures: CDR, age specific death rate; early neonatal, neonatal, infant mortality rates, perinatal mortality and maternal mortality rates; Life table, complete and abridged life table and their construction; trends of mortality in developed and developing countries; determinants of mortality; causes of high mortality in LDCs with special reference to India; measures taken in India to improve health status**.**

Module III: Migration and Urbanization
Measures of migration, internal and international migration: theories of migration: push and pull factors, Lee's and Harris Tadaro models. Urbanization: its measures and determinants; factors propelling urbanization in developed countries; urbanization in developing countries: its patterns and factors promoting urbanization in the developing countries with special reference to India; problems of urbanization in developing countries.

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
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Module IV: Population Policy

Arithmetic, geometric and exponential growth rates of population; relation between growth rate and doubling time of population, age distribution (age pyramid), young and old age dependency ratios and their determinants; dependency ratio and savings, physical and human capital formation; population estimates and projections: mathematical and demographic methods; measures of labour force; factors determining labour force participation rate. Major demographic features of India's population (birth rate, death rate and their trends); evaluation of family welfare programme in India, National Population Policy 2000; Manpower planning in India.

Suggested Readings:

- Shryock, H., The *Methods and Materials of Demography*.
- Bogue, D J., *Principles of Demography*
- Barcley, G W., *Techniques of Population Analysis*
- United Nations Publications, *The Determinants and Consequences of population Trends* (Series No.50)
- Goon, Gupta & Dasgupta, *Fundamental Statistics(Vol-II)*
- Kapoor, V K, *Fundamental of Applied Statistics*.
- Saxena, P. C. and Talwar P. P. (Eds.), *Recent Advances in the Techniques of Demographic Analysis*, Himalayan Publishers, Bombay, 1988.
- Coale, A. J. and E. M. Hoover, *Population Growth and Economic Development in Low Income Countries*, Oxford University Press.
- Becker, G. S., *An Economic Analysis of Fertility in Demographic and Economic Change in Developed Countries*, A Report of NBER, Princeton University Press, Princeton, 1960.
- Easterlin, R. A., *An Economic Framework for Fertility Analysis Studies in Family Planning*, 1975.
- Leibenstein, *Economic Backwardness and Economic Growth*, Wiley, New York, 1957.
- Leibenstein, An Interpretation of the Economic Theory of Fertility, Promising Path or Blind Alley, *The Journal of Economic Literature*, XII (2), 1974.
- Agarwala, S. N., *India's Population Problems*, Tata - Mcgraw Hill, New Delhi.
- Srinivasan, K., *Basic Demographic Techniques and Applications*, Sage Publications, New Delhi, 1992.

DEMOGRAPHY
Course Code: ECO/MJ-E/604

Course Objective: *The demographic behaviour is highly complex in view of its being enmeshed in the socio-cultural matrix of the society. However, the process of industrialization and urbanization tend to reduce the strength of traditional mores and values of the society. This results in the steady growth of market relations and use of cost-benefit analysis in decision making process. The application of economic theory to the study of population is not only relevant but also useful, so population economics is included.*

Course Outcomes:

CO1: The learners will acquire knowledge about the basics of demography, their components and the population measures
CO2: They will also learn about the various theories of population
CO3: They will acquire knowledge about population structure and determinants of age and sex structure.
CO4: The learners will have a better understanding of fertility and mortality

Module I: Demography

Meaning and scope of demography; Components of population growth and their inter dependence; Linkage between economics and demography; Measure of population change; Structure, distribution and sources of population data-Population census, Vital registration system, Sample Registration system, Sample surveys- features, advantages and problems, Population register.

Module II: Theories of Population

Theories of Population-Malthus, optimum theory of population; Theories of demographic Transition, Marx's theory- views of Medows, Enke and Simon; Population and development.

Module III: Structure of Population

Population trends in the twentieth century; Population explosion-threatened or real. distant or imminent; International aspects of population growth and distribution; Pattern of age and sex structure in developed and less developed countries; Determinants of age and sex structure: Demographic effects of sex and age structure, economic and social implications.

Module IV: Fertility and Mortality

Importance of study of fertility-total fertility rate, gross and net reproduction rate: Levels and trends of fertility in more and less developed countries; Factors affecting fertility- socioeconomic factors (economic status, health, education, nutrition, caste, religion, race, region, rural-urban and status of husband and wife); Measures of Mortality-death rates, crude and age-specific rates, Mortality at birth and infant mortality rate, Health outcomes and their relationship with economic performance. Levels and trends in more and less developed countries; Sex and age pattern of mortality; Factors for decline in mortality in recent past.

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
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Suggested Readings:

- Agarwala, S.N, India's population problem, Tata McGraw Hill Co, Mumbai.
- Bogue DJ, (1971) Principles of demography, John Wiley. New York.
- Bose A, India's basic demographic statistics, B.R Publishing Corporation, New Delhi.
- Chenery, H and T.N Srinivasan (eds) (1989), Handbook of development economics, Vol I&II, Elsevier, Amsterdam.
- Chiang, C.L (1974) Life Tables and Mortality Analysis, WHO, Geneva
- Choubey, P.K, (2000), Population policy in India, Kanishka Publication, New Delhi.
- Simon, J.L, (1992), Population and Development in poor countries, Princeton University Press.
- Srinivasan, K and A Shariff, (1998), India: Towards population and demographic goals, Oxford University Press.
- Srinivasan, K, (1998), Basic Demographic Techniques and Applications, Sage, New Delhi.
- H.S. et. al: Methods and Materials of Demography, Academic Press, New York.
  Hinde, Andrew: Demographic Methods, Routledge Preston .
- S. H., Heuvenile, P. & Guillot, M.: Demography, Wiley Cox, P. R.: Demography, Cambridge University Press.
- Jay Weinstein & V. K. Pillai: Demography – The Science of Population, Pearson.
- Deepak K Mishra (Ed) Internal Migration in Contemporary India, Sage Publications, New Delhi, 2016.

ECONOMETRICS
Course Code: ECO/MJE-E/605

Learning Objective: This paper is introduced to equip the students with basic theory of basic Econometrics models, its relevant applications and problems of the methods.

Course Outcomes:
CO1: The student will learn about the classical linear regression model.
CO2: They will learn the general linear regression model.
CO3: They will understand the problem of auto-correlation and heteroscedasticity and its implication.
CO4: the student will also learn about the problem of multicollinearity and errors in variables.

Module I: Linear Regression Model

Properties of good estimators in small and large samples - Ordinary Least Square (OLS), 2-variable model, assumptions and properties of OLS estimators (BLUE) – Unbiased estimator of the variance of the error term – Confidence interval and significance - Extension of two variable model, logarithmic and reciprocal transformation.

Module II: General Linear Model

Assumption of GLS and estimation – Correlation matrix, properties of estimators: The invariance and testing their significance and confidence intervals.

Module III: Autocorrelation and Heteroscedasticity

Autocorrelation: Meaning and types (positive and negative) Effects of autocorrelation on the properties of OLS estimators – Detection of autocorrelation: Durbin-Watson test and von-Neumann ratio. Heteroscedasticity: Meaning and effects on the properties of the OLS estimators – Detection: Glacer method.

Module IV: Multicollinearity and Errors in Variables

Multicollinearity: Meaning, its effects on the estimation of parameters and their variances, detection of multi collinearity, Errors in variables: Meaning (errors in equation and variables) Effects of errors in variables when errors occur in (a) dependent variable, (b) independent variable, and (c) both dependent and independent variables.

Suggested Readings:

- Nagar,A.L.andR.K.Das,*BasicStatistics*,OxfordUniversityPress,NewDelhi,1993.
- Gupta,S.C.,*FundamentalsofAppliedStatistics*,S.ChandandSons,NewDelhi,1993.
- Hadley, G, *Linear Algebra*, Addison-Wele publishers Company, Tokyo.
- Vatssa,B.S.,*TheoryofMatrices*,WilyEasternLimited,NewDelhi,1995
- Gujarati,D.N. *Basic Econometrics*,McGrawHill,NewDelhi,1995.
- Koutsoyiannis, A., *Theory of Econometrics*, The MacMillan Press Ltd., London,1977.
- Johnston,J, *Econometric Methods*, McGraw Hill,BookCo.,London,1991.
- Maddala, G.S., *Econometrics*, McGrawHill, NewYork,1999.

Head/विभागाध्यक्ष
Department of Economics
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- Salvatore, Dominick and Derrick Reagle, *Statistics and Econometrics*, Schaum's Outline Series, Tata McGraw-Hill Publishing Company Limited, New Delhi,2005.
- Stock,James, H. and MarkW.Watson,*IntroductiontoEconometrics*,PearsonEducation,2004.
- J.F.Wooldridge(2008):*IntroductoryEconometrics:AModernApproach*,Thirdedition:South-WesternCengageLearning India
- Green,W.H.(2009*):Econometric Analysis*, fifth edition, Pearson Publication
- Johnson, R. A .and D.W. Wichern (2009):*Applied Multivariate Statistical Analysis*, Fifth edition, PHI learning Pvt. Ltd., New Delhi
- Mills,T.CandR,N.Markellos(2008):*TheEconometricModelingofFinancialTimeSeries*,third edition, Cambridge University Press
- Patterson, Kerry (2002):An *Introduction to Applied Econometrics: A Time Series Approach,* Palgrave Macmillan
- Enders, W (2004): *Applied Econometric Timeseries*, Second edition, Wiley
- Chatfield, Chris (2004): *The Analysis of Time Series: An Introduction*, sixth edition. Chapman and Hall/CRC New York

INFRASTRUCTURE ECONOMICS
Course Code: ECO/MJ-E/605

Course Objectives:

Infrastructural facilities act as the spring broad for enhancing the functional capacities of the economy. This paper contains the topics which treat the different infrastructural facilities as a kind of supportive lattice of the economy. Costing methods of infrastructural services and facilities are also included.

Course Outcome:

CO1: This paper dealing with a large number of practical issues faced in everyday life has proved to be very instructive to the learners.
CO2: Having studied this paper, students will be able to learn about the importance of different infrastructure such as transport and communication, and energy.
CO3: Students will learn about the importance of social infrastructure, health and education.
CO4: Students will avail the knowledge about the Social Infrastructure, Health and Education

Module I: Introduction

Infrastructure and economic development – Infrastructure as a public good – Social and physical infrastructure – Special characteristics of public utilities – Economies of scale of joint supply – Marginal cost pricing vs. other methods of pricing of public utilities – Cross subsidization: Free prices, equity and efficiency.

Module II: Transport Economics and Communication

The structure of transport costs and location of economic activities – Demand for transport – Model of freight and passenger demand – Cost functions in the transport sector – Principle of pricing – Special problem of individual models of transport. Rate making in telephone utilities – Principles of decreasing costs in telephone industry- Characteristics of postal services – Criteria for fixation of postal rates – Measurement of standards of service in telephone and postal utilities.

Module III: Energy Economics

Primacy of energy in the process of economic development – Factors determining demand for energy – Energy conservation – Renewable and non-conventional sources of energy – Energy modeling.

Module IV: Social Infrastructure, Health and Education

Organization and financing of supply of social services – Private vs. public sector financing – Debate about fixation of prices of social services. Education and economic growth – Approaches to educational planning: Rate of return and manpower balance approaches – The issues in education policy. Health dimensions of development – Determinants of health: Poverty, malnutrition, illiteracy and lack of information – Economic dimension of health care: Demand and supply of health care – Financing of health care and resource constraint.

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Suggested Readings:

- Indian Council of Social Sciences Research (ICSSR), Economics of Infrastructure, Vol.VI, New Delhi, 1976.
- National Council of Applied Economic Research (NCAER), India Infrastructure Report: Policy Implications for Growth and Welfare, NCAER, New Delhi, 1996.
- Norton, H. S., Modern Transport Economics, C E Merrill, London, 1971.
- Garfield, P. J. and W. Lovjoy, Public Utility Economics, Prentice Hall, Englewood Cliffs, 1964.
- Centre for Monitoring Indian Economy, India: Energy Sector, CMIE, Mumbai, 1996.
- Vaizey, J., Economics of Education, Faber and Faber, London, 1962.
- Baru, R V, Private Helathcare in India: Social Characteristics and Trends, Sage Publications, New Delhi, 1998.

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Department of Economics
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ECONOMY OF NORTH-EAST INDIA WITH SPECIAL REFERENCE TO ARUNACHAL PRADESH

Course Code: ECO/MJ-E/607

Learning Objectives:

The North-eastern economy has a number of issues which carry elements of regional specificity. So, these problems demand a special attention. This paper treats the specificity of the region rigorously and tries to identify the solution of the problems infesting the region.

Course Outcome:

CO1. The learners will acquire knowledge about the basic structure of the North East Economy in general and Arunachal Pradesh in particular.
CO2. They will also learn about the issues related to population growth and urbanisation in the north east region of India.
CO3. They will acquire knowledge about the unique agricultural practices and challenges of industrialisation in North east India.
CO4. They will have a better understanding about the fiscal and development issues and the acute challenges faced in infrastructure development. This paper will bring the students to the midst of the problems of the Northern economy. They avidly study this paper and try to find solution of regional problems.

Module I: Structure of North East Economy

North East economy: An overview – Basic Features of North East economy - Relative performance of the North East economy in the country - Economic performance of the region – Level and growth of NSDP and Per Capita NSDP – Changing sectoral composition of state income and sectoral contribution to the growth of income with respect to Arunachal economy - Natural Resource Base – Land, mineral, water and forests – Status of human development in N.E. India.

Module II: Population

Population: Trends and features, causes for its rapid growth, population growth and economic development - Urbanization: Trends and features, causes for rapid growth and consequences - Work force structure and its changes, participation of female labour force, unemployment situation in North East India.

Module III: Agriculture and Industries

Agricultural practices in the region – Permanent cultivation, shifting cultivation and its effects – Jhum cultivation and the problem of induction of new technology - Land tenure and problems of agricultural credit - Land use pattern and cropping pattern in North East India and Arunachal Pradesh - Agricultural productivity – Causes of low productivity - Status of industry in North East - Factors inhibiting the growth of industries.

Module IV: Infrastructure, Fiscal and Developmental Issues

Infrastructure development: Power, transport, communication, market and banking: NEDFi and SIDBI– State of public finance and fiscal issues in North Eastern economy with special reference to Arunachal Pradesh – Opportunities and Challenges of North East economy in the background of economic liberalization of India – Opening of NE economy and Look East/ Act East policy of the government of India.

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

Suggested Readings:

- NEDFi Data Bank, *Quarterly Journal of Northeastern States*, Different Years.
- Alam, K (Ed), *Agricultural Development in Northeast India*, Deep and Deep Publications, New Delhi, 1993.
- Banerjee, Amalesh and Biman Kar (Ed), *Economic Planning and Development of Northeastern States*, Kanishka Publishers and Distributors, New Delhi, 1999.
- Behera, M.C. and N.C. Roy (Eds), *Trends in Agrarian Structure in the Hills of Northeast India,* Commonwealth Publishers, New Delhi, 1997.
- Das, Gurudas, *Tribes of Arunachal Pradesh in Transition*, Vikash Publishing House, New Delhi, 1995.
- Ganguly, J.B., (Ed), *Urbanization and Development in Northeast India*, Deep and Deep Publications, New Delhi, 1995.
- Majumdar, D.N. (Ed), *Shifting Cultivation in Northeast India*, Omsons Publications, New Delhi, 1990.
- Mitra, A., *Internal Migration and Economic Development in the Hills*, Omsons Publications, New Delhi, 1997.
- Yogi, A.K., *Development of the Northeast Region--- Problems and Prospects*, Spectrum Publications, New Delhi.
- Behera, M.C. (Ed), *Agricultural Modernisation in Eastern Himalayas*, Commonwealth Puiblishers, New Delhi, 1998.
- Planning Commission, Government of India, *National Human Development Report*, 2001.
- *Assam Economic Journal* (different issues), Dibrugarh University.
- Baruah, Alokesh (Ed), *India's North-East Developmental Issues in a Historical Perspective*, Manohar Publishers, New Delhi, 2005.
- Government of Arunachal Pradesh*, Human Development Report of Arunachal Pradesh, 2005.*
- Government of India, Planning Commission*, State Development Report of Arunachal Pradesh, 2009.*
- Deepak K Mishra and Vandana Upadhyay *(Ed) Rethinking Economic Development in North East India: The Emerging Dynamics,* Routledge, London/New Delhi, 2017
- *Sumi Krishna (Ed) Routledge Readings on Security and Governance in Northeastern India: Resource Conflicts, Militarisation and Development Challenges,* Routledge, London and New York, 2023

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

RURAL ECONOMICS
Course Code: ECO/MJ-E/608

Objectives: It is attempted to impart thoroughly the conceptual backgrounds on the study of agricultural economics. This will help the students' understandings while exposing themselves to the real-world situation of agricultural developments and problems.

Outcomes:
CO1: Students will be able to understand the importance of rural economy in India and also the problems surrounding it: unemployment, inequality, poverty, indebtedness, migration, etc.
CO2: Students will be able to understand the evolution of rural development programmes and its present scenario in India
CO3: Students will be able to understand the role of Panchayati Raj, NGOs, SHGs, and Cooperatives in rural development
CO4: Student will be able to understand the complex relations among economic agents, politicians, state machineries, and village institutions in the contemporary rural society of India.

Module I: Introduction to Rural Economics

Importance of Rural economy in India; rural inequality, rural unemployment and rural poverty; Rural-Urban nexus, Need for integrated and holistic approach

Module II: Social and Economic Dyanamics of Rural India

Inequitable distribution of Rural Asset, low absorption capacity - Rural Indebtedness, low market interaction, rural industrialization, rural-urban migration

Module III: Evolution and Strategy of Rural development in India

Strategy of rural development in India: Historical and Present Scenario; MGNREGA and Its impact on Rural India; Panchayats and Cooperatives, Self Help Groups, and Non-Governmental Organizations – their roles in preparation of rural development plan and projects, Government intervention and Rural Livelihoods (NRLM).

Module IV: Rural Finance & Role of Cooperatives

Role of Rural Credit–Characteristics and Sources of Rural Credit–Institutional and Non-Institutional, Credit; Reorganization of Rural credit – cooperatives; commercial banks, Regional Rural Banks; Role of NABARD; Co-operative Movement; Problems and Prospects of Agricultural Corporation in India.

Suggested Readings:

- Beteille, Andre (1974). Studies in Agrarian Social Structures. OUP Delhi
- Harris, John (2017) Rural Development: Theories of Peasant Economy and Agrarian Change. Rawat Publication, Jaipur
- Barik, B.C. and U.C. Sahoo (2009) Panchayati Raj Institutions And Rural Development: Narratives On Inclusion Of Excluded. Rawat Publication, Jaipur
- Ellis, Frank (2005) Rural Livelihoods and Poverty Reduction Policies. Routledge, London
- Kapoor, A. K., Mohammad M. Hussinat (1997) Rural Development Through NGOs. Rawat Publication, Jaipur7. Basu, Priya (2006) Improving Access to Finance for India's Rural Poor. The World Bank, Washington
- Green, Gary Paul (2013) Handbook of Rural Development. Edward Elgar, Massachusetts
- Harris-White, Barbara (2003). Indian Working Essays on Society and Economy. Cambridge University Press, New York
- Bhagwati, Jagdish and Arvind Panagariya (2013) Reforms and Economic Transformation in India. OUP, New York

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

ADVANCED MATHEMATICAL ECONOMICS
Course Code: ECO/MJ-E/609

Learning Objective: This course has been designed to impart the students about advanced tools of mathematics along with is application in economic analysis.

Course Outcomes:
CO1: The learners will learn about production function.
CO2: They will also learn about the application of matrix in economic model and input-output analysis.
CO3: The learners will gain knowledge about the game theory
CO4: They will also acquire knowledge about the differential equation and difference equation.

Module I: Production Function and its Application

Homogenous and non-homogenous production functions; production function and Euler's theorem; Cobb-Douglas production function and its properties; CES production function and its properties; Cobb-Douglas production function as a special case of CES production function; numerical application.

Module II: Application of Matrix Algebra

Review of matrix inversion and crammer's rule; partial equilibrium market model; simple national income model; input-output analysis- structure of input-output table, static open input-output model, Hawkins-Simon condition.

Module III: Game Theory

Types- two-person zero-sum game, non-zero-sum game, variable sum game, constant-sum game, cooperative and non-cooperative game; saddle point, value of the game; solution of a game with saddle point-pure strategy (maximin and minimax principle); rules of dominance; solution of a game without saddle point- mixed strategy; Nash equilibrium; Prisoner's dilemma.

Module IV: Differential Equation and Difference Equation

Deferential equation-meaning, types, solution of first order differential equation and application to Harrod-Domar growth model; difference equation- meaning, types and solution of first order differential equation and application to Cobweb model.

Suggested Readings:

- Allen, R.G.D., *Mathematical Analysis for Economics*, Macmillan, 1976.
- Baruah, Srinath, *Basic Mathematics and its Application in Economics*, Macmillan India Limited, Calcutta and Chennai, 2001
- Bose, D, *An Introduction to Mathematical Economics*, Himalaya Publishing House, Mumbai, 2007
- Chiang, A.C., *Fundamental Methods of Mathematical Economics*, McGraw Hill, Kogakusha, New Delhi, 1974
- Chiang, A. C and Kevin Wainwright, *Fundamental Methods of Mathematical Economics*, McGraw Hill Education (India) Private Limited, Chennai, 2018

- Mehta, B. C. and G. M. K. Madnani, *Mathematics for Economists*, Sultan Chand &Sons, New Delhi, 2009
- Taha, A. Hamdy, *Operations Research: An Introduction*, Prentice Hall of India Private Limited, New Delhi, 2002
- Yamane, Taro, *Mathematics for Economists: An Elementary Survey*, PHI Private Limited, Delhi, 2013.

LABOUR AND INFORMAL ECONOMICS

Course Code: ECO/MJ-E/610

Course Objectives:

This course will serve to introduce the various concepts of Labour economics to the students. The interrelationship between labour and economic development will be examined in detail. The course will also review the issues related to employment, wage determination, labour mobility and the problems of the Indian Labour market.

Course Outcomes:

CO1: The course helps the learner to reflect upon the linkages between labour and economics.
CO2: They will also learn about the problems of labour related to employment and unemployment.
CO3: The learner will acquire knowledge about the various theories of labour and issues related to wage determination and labour productivity.
CO4: The learners will acquire knowledge about informal sector and labourers engaged in the informal sector.

Module I: Introduction to labour Economics

Concept, Nature and scope of labour economics; Labour market- concept, Labour supply, Labour demand, Equilibrium in the labour market; An overview of major theories of labour market mismatch; Imperfections in the labour market- Job search and Job matching, Imperfect information, labour market institutions of minimum wage and trade unions; segmentation of labour market.

Module II: Employment and Unemployment

Concepts of labour force participation and underutilization; Employment/ Unemployment definitions applied in international and national context; Informal employment; Decent work- Concept, Measurement and policy response; Conditions of work; Theories of unemployment; Relation between employment and manpower planning technique; Manpower techniques.

Module III: Wage determination

Theories of wage- Classical, neo classical and modern; Efficiency wage models; Wage determination in organized and unorganized sector; Human capital theory of wage; Wage differentials; Labour market discrimination; relation between wage and employment; Labour productivity concept- Measurement, determinants and measures to increase labour productivity

Module IV: The Informal Enterprises and Labour

Unorganised or informal sector: Unorganised enterprises and informal workers; Rural and urban informal sector; Theories of unorganised sector: Boeke, Lewis and Todaro; Explanation for the growth of unorganised sector: Growth led and distress driven development in informal sector; Interlinkages between formal and informal sector; Trends and magnitude of informal sector in India; Women in informal sector.

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

Suggested Readings:

- Michael Hopkins (2002): ‘Labour market planning revisited’, Palgrave Macmillan Ashenfelter, Orley and Richard Layard, The Handbook of labour Economics. Vol.1 and 2. New York: North- Holland, 1986; Vol.3A, 3 B and 3C, 1999
- George J. Borjas (2000): ‘Labour Economics’ McGrawhill, New York Mcconnel and Stanley Brue (2002): contemporary labour Economics, McGrawhill, New York
- Banerjee, A. V. and E. Duflo (2011): *Poor Economics – A Radical Rethinking of the Way to Fight Global Poverty,* Random House India, Noida.
- Bhavani, T. A. and N. R. Bhanumurthy (2012): *Financial Access in Post- reform India*, Oxford University Press, New Delhi.
- Boeke, J.H. (1953): *Economics and Economic Policy of Dual Societies*, Institute of Pacific Relations, New York.
- Farazi, S. (2014): *Informal Firms and Financial Inclusion: Status and Determinants*, Policy Research Working Paper 6778, (The World Bank, Development Research Group, Finance and Private Sector Development Team, February).
- Ghose, A. (2016): *Informality and Development*, Presidential Address delivered at 58^{th} Annual Conference of Indian Society of Labour Economics, IIT Guwahati, 24^{th} November.
- Hansenne, M. (1991): *The Dilemma of the Informal Sector- Report of Director General (Part1*), International Labour Conference 78^{th} Session, Geneva, 28 January.
- Harris, J. R. and M. P. Todaro, (1970): ‘Migration, Unemployment and Development: A two Sector Analysis’, *American Economic Review*, Vol. 60, No.1, Pp:126- 142.
- Lewis, W. A. (1954): *Economic Development with unlimited Supply of Labour*, The Manchester School.

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

SEMESTER IV

DEVELOPMENT ECONOMICS
Course Code: ECO/MJ-E/611

Learning Objectives: *Objective: In this paper, planning is included in Development Economics to make it more relevant. The new concepts like 'community approach to development' and 'trade and politicaleconomy of development' are also incorporated.* The course will also review the structural changes brought about by economic growth and the implications for the population.

Course Outcomes:
CO1: The course helps the learner to reflect upon the linkages between economic growth and population and about the structural change.
CO2: They will also learn about the interrelationship between economic development and population and the impact of population growth on economic development.
CO3: The learner will acquire knowledge about the issues related to the agrarian outcomes of population growth.
CO4: The learners will know about Population and Development Experiences in India from the Regional perspective

Module I: Sectoral aspects of Development

Role of Agriculture in Economic Development; Barriers to Agriculture; Agricultural Transformation: Designing an Agricultural Strategy; Rationale and Pattern of Industrialization in developing countries; its relation to agricultural modernization, Choice of Techniques, appropriate technology and employment; Terms of Trade between Agriculture and Industry.

Module II: Economic Development and Institutions

Market efficiency and Market Failure; Role of State in Economic Development: State Capacityand State Failure; The Washington Consensus : its critique, Issues of Good Governance; Community approach to development: State, market and community – Market and prisoners' dilemma – Community, social capital and development – Critical evaluation of the socialcapital approach to development.

Module III: Development Planning

Rationale for planning in a developing economy – Input-output model closed and open; Samuelson's substitution theorem, Hawkins-Simons condition and sectoral projections – Plan models in India: Mahalanobis model – Plan in a market oriented economy.

Module IV: Trade and Political Economy of Development

Import substitution and export-led growth – Krueger's model of rent seeking society – Institutions and development: Contribution of Stephen Knack and Philip Keefer – Foreign direct investment, foreign institutional investment and economic development – Foreign aid
and economic development

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

Suggested Readings:

- Meier, G, *Leading Issues in Economic Development*, Oxford University Press, New Delhi, 1990
- Higgins, B., *Economic Development*, W.W. Norton, New York, 1959.
- Baran, Paul, *Political Economy of Growth*, Monthly Review Press, New York, 1967.
- Todaro, M.P., *Economic Development*, Longman, London, 1996.
- Myrdal, G., *Economic Theory and Underdeveloped Regions*, Duckworth, London, 1957.
- Roy, D., *Development Economics*, Oxford University Press, 1999.
- UNDP, *Human Development Reports*, Oxford University Press.
- Thirwal, A.P., *Growth and Development*, Macmillan, London, 1999.
- Chenery, H and T.N. Srinivasan (1995), *Hand Book of Development Economics*, Vol-I, II Elsevier, Amsterdam
- Behrman, S and T.N. Srinivasan (1995), *Hand Book of Development Economics*, Vol-III, Elsevier, Amsterdam
- Chakravarty, S (1987), *Development Planning: The Indian Experience*, Clarendon Press, Oxford.

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

GENDER AND DEVELOPMENT ECONOMICS
Course Code: ECO/MJ-E/612

Course Objective:

Gender has occupied a very important area of serious study and research. This is highly relevant in view of the age-old gender discrimination being totally unacceptable. This paper tries to identify some of the basic gender related issues and show the feasible steps for bringing gender equality.

Course Outcomes:

CO1:The course helps the learner to reflect upon the linkages between Gender and Economics.
CO2:They will also learn about the issues related to work and employment and Segregation in labour market.
CO3:The learner will acquire knowledge about the issues related to agriculture, environment, health and well-being from the gender perspective.
CO4:The Mainstreaming of gender concerns will ensure that the learner will know about gender under capitalism.
CO5:This paper has created a very good response among the learners and it has improved their understanding of the gender related issues.

Module I: Gender and Economics: Introduction

Gender and feminisms - Economic methodology and feminist critiques - Development: Meaning and concept - Human development and gender - Construction of Human Development Index and Gender-related Development Index and criticisms.

Module II: Work and Employment

Types of work, work participation rates, labour force participation rate - Female labour supply: Neo-classical theory - Models of allocation of time: Becker and Mincer - Segregation in labour market: Discrimination in work place, measures of discrimination, Differential employment - Household work and non-market work: Time Use Survey.

Module III:Agriculture, Environment, Health and Well-Being

Gender and property rights: Theories, experiences in South Asia, India and Arunachal Pradesh - Boserup's thesis on gender and agricultural change and its criticisms - Technological change and female labour - The impact of Green Revolution - Gender, environment and development: Linkages - Gender issues in natural resource management. Sex ratio, child sex ratio, son preference, differential mortality between sexes - Differential access to health care - Intrafamily distribution of food and nutrition - Women's autonomy, fertility and health status - Health and poverty.

Module IV: Gender and Globalisation

Women under capitalism: Review of political economy approaches - Structural adjustment and women - Gender, informalisation and flexible production - Review of gender and development policies: Role of international bodies, governments and civil society institutions - Mainstreaming gender concerns: Methods and approaches.

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

Suggested Readings:

- Dewan, Ritu, ‘Gender in Neoclassical Economics: Conceptual Overview’, *Economic and Political Weekly*, Vol 30, No 17, pp 46-48, 1995.
- Elson, D., Theories of Development. Chapter 6 in *Gender and Development: Theoretical, Empirical and Practical Approaches*, Lourdes Beneria with Savitri Bisnath (eds.). Cheltenham U. K.: Edwin Elgar Publishing Limited. [first published in the Elgar companion to feminist economics in 1999], 2001.
- Feber, Marianne A. and J A Nelson (Eds), *Beyond Economic Man: Feminist Theory and Economics,* University of Chicago Press, Chicago, 1993.
- Nussbaum, Martha C., *Women and Human Development: The Capability Approach*, Kali for Women, New Delhi. (Introduction: Feminism and International Development), 2000.
- Ostergaard, L., ‘Gender’ in L. Ostergaard (ed) *Gender and Development: A Practical Guide*, Routledge, London and NewYork, 1992.
- Seth, M., *Women and Development: The Indian Experience*, Sage Publications, New Delhi, 2000.
- Amsden, Alice H., ‘Introduction’ in Alice H. Amsden (ed), The *Economics of Women and Work*, St. Martin’s Press, New York, pp 11-35, 1980.
- Anker Richard, ‘Theories of Occupational Segregation by Sex: An Overview’, in M F Loutfi (Ed), *Women, Gender and Work: What's Equality and How do We Get there?* ILO, Rawat Publication, Jaipur, 2002.
- Becker, Gary, ‘A Theory of Allocation of Time’, *The Economic Journal*, Vol 80, No. 200, pp 493-517, 1965.
- Cain, Glen g, ‘The Economic Analysis of Labour Market Discrimination: A Survey’, in O Ashenfelter and R Layard (eds), *Handbook of Labour Economics*, Vol I, Elsevier Science Publishers, BV, 1986.
- Hirway, I., ‘Conceptual and Methodological Issues of Time Use Studies’, *Proceedings of the International Seminar on Time Use Studies*, CSO, Government of India, New Delhi, 1999.
- Jose, A V (Ed), *Limited Options: Women Workers in Rural India.* ARTEP, ILO, New Delhi, 1989.
- Raju, Saraswati and Depica Bagchi (Eds), *Women and Work in South Asia: Regional Patterns and Perspectives*, Routledge, London and New York, 1993.
- Standing, G., *Labour Force Participation and Development*, International Labour Office, Geneva, 1978.

REGIONAL ECONOMICS
Course Code: ECO/MJ-E/613

Learning Objectives: The basic objective of the course is to provide an overview of the scope and method of regional economics to the students. The significance of the spatial aspects of development process is being increasingly realized in a globalised world. The purpose of the paper is to equip the students with the basic tools of regional analysis.

Course Outcomes:

CO1. The learners will learn about the concept of region and regional economics
CO2. They will learn about spatial variation in cost, income and employment
CO3. They will learn about location factors, theories and measurement of locational concentration
CO4. They will know about the input-output analysis and its application in regional analysis
CO5. They will learn about regional growth and dependency theory

Module I: Introduction to Regional Economics and Economic Analysis

Regional economics: Definition and scope - Defining a region -Types of Regions, Functional Region, Delimiting functional regions - Relations of activities within a region- Forward and backward linkages - Regional specialization.
Price determination in regional setting - Market area analysis - Spatial variation in costs - Regional income and employment determination - Regional income multiplier.

Module II: Theories of Firm Location: Agglomeration Economies

Objectives of location choice - Location factors - Location and the theory of production - Determinants of agglomeration - Location measures: Location quotient, coefficient of localization, localization curve

Module III: Regional Input-Output Analysis

Input-output analysis: Introduction - Input-output analysis in a single region - Input-output analysis in a two or more regions: The inter-regional input-output (IRIO) model - Input-output analysis in a two or more regions: The multi-regional input-output (MRIO) system.

Module IV: Regional Growth and Development

Causes of regional growth - Interregional trade and factor movements - Interregional convergence and divergence - Central place theory; Growth pole theory; theory of cumulative causation; Dependency theory: Centre-periphery and world systems theories.

Suggested Readings:

- Walter Isard, Location and Space-Economy, Cambridge, Mass, The MIT Press, 1956.
- Hugh O. Nourse, Regional Economics, New York, McGraw-Hill, 1968.
- Harry W. Richardson, Regional Economics, Urbana, Ill, University of Illinois Press, 1979.
- Richardson, Harry, Regional Growth Theory, New York, John Wiley and Sons, 1973.
- Krugman, P. Development, Geography and Economic Theory, 1995.
- Krikelas, A., "Why Regions Grow: A Review of Research on the Economic Base Model."Economic Review. Federal Reserve Bank of Atlanta. July/August, 1992.
- W. Isard, et al., Methods for Interregional and Regional Analysis. Ashgate, Adershot, 1998.
- Fujita, M., P. Krugman and A. Venables, The Spatial Economy, 1999.

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

- Blanchard, O.J. and Katz, L., "Regional Evolutions." Brookings Papers on Economic Activity, 1992.
- Isserman, Andrew, M., "It's Obvious, It's Wrong, and Anyway They Said it Years Ago? Paul Krugman on Large Cities." International Regional Science Review . 19 # 1 & 2: 37 – 48, 1996.
- Kaldor, Nicholas, "The Case for Regional Policies." Scottish Journal of Political Economy, 17 (Nov), 337 – 348, 1970.
- King, L.J., Central Place Theory, Beverly Hills, CA, Sage, 1984.
- Krugman, Paul, "Urban Concentration: the Role of Increasing Returns and Transportation Costs." International Regional Science Review, 19 # 1 & 2: 37-48, 1996
- Miller, R., and P. Blair. Input-Output: Foundations and Extensions, 1985.
- Perroux, Francois, "Economic Space, Theory and Applications." Quarterly Journal of Economics, LXIV, 1950.

- Thomas, Morgan D, "Growth Pole Theory: An Examination of Some of Its Basic Concepts," in Niles Hansen (ed.) Growth Centers in Regional Economic Development, New York: The Free Press: 50-81, 1972.
- Temple Marion, “Regional Economics, 1994 St. Martin Press New York USA
- Edwards, Mary E, “ Regional and Urban Economics and Economic Development Theory and methods, Auerbach Publication Taylor & Francis Group, USA

INSTITUTIONAL ECONOMICS
Course Code: ECO/MJ-E/614

Course Objectives: To form a detailed view about current development of new institutional theory, about main instruments and approaches. Further to develop competences, which allow to implement the methodology of new institutional economics towards solving practical problems.

Course Outcomes:

CO1: Learners will have information about different concepts of institutional economics.
CO2: Learners will have knowledge about how different institutions affect the transaction costs in a economy.
CO3: Learners will know about different aspects of contract theories.
CO4: Learners will know about different aspects of property rights.

Module I: Institutions and Institutional Economics

Definitions of institutions: different approaches. Functions of institutions. Coordination, cooperation, and redistribution problems. Norms. Rules. Conventions. Enforcement systems. Examples based on game theory. Formal and informal institutions.
Rational choice model. Full and perfect information. Bounded rationality. Incomplete and imperfect information. Ultimate game. Beauty contexts game. Assumptions of New Institutional Economics. Incomplete specification of rules.

Module II: Institutions and Transaction Costs

Definitions of transaction and transaction costs. Transaction cost theory. Specific investments. Site specificity, physical asset specificity, dedicated assets. Governance forms. Fundamental transformation. North-Egerton classification of transaction costs. Transaction goods. Measurement costs.
The role of networks in institutional analysis. Evolutionary model of convention formation in different structures. Basic measures: centrality, closeness, betweenness.

Module III: Contract Theories

Incomplete contracts. Grossman-Hart model. Decision rights. Principal-agent framework. Asymmetric information. Adverse selection. Signalling. Screening. Moral hazard. Hidden action and information. Delegation. Agency costs. Incentive contracts. Opportunistic behavior.

Module IV: Institutions of Property Rights

Definition of property rights. Categories of property rights. Property rights regimes. Collective property. Common property. Residual rights. Land rights. The naive theory of property rights emergence. The Coase theorem and externalities.
Agency problems. Separation of ownership and control. Residual rights and organizational forms. Open corporations. Partnerships. Non-profit organizations. Measurement of agency costs.

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

Suggested Readings:

- Bloom, N., Liang, J., Roberts, J., & Ying, Z. J. (2015). Does Working from Home Work? Evidence from a Chinese Experiment*. Quarterly Journal of Economics, 130(1), 165–218.
- Furubotn, E. G., & Richter, R. (2005). Institutions and Economic Theory: The Contribution of the New Institutional Economics (Vol. 2nd ed). Ann Arbor: University of Michigan Press.
- Guiso, L., Sapienza, P., & Zingales, L. (2006). Does Culture Affect Economic Outcomes? Journal of Economic Perspectives, 20(2), 23–48.
- Hendrikse, G., Hippmann, P., & Windsperger, J. (2015). Trust, transaction costs and contractual incompleteness in franchising. Small Business Economics, 44(4), 867–888.
- North, D. C. (1990). Institutions, Institutional Change and Economic Performance. Cambridge: Cambridge University Press.
- Property rights for the poor: effects of land titling. (2010).

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

ECONOMICS OF SOCIAL SECTOR
Course Code: ECO/MJ-E/615

Course Objectives: The objective of the paper is to acquaint the learners with the history and nature of the social indicators and their importance in social science research. It will also examine the theoretical perspectives and limitations of the indicators on health and education.

Course Outcome:

CO1: *The learners will acquire knowledge about the basic concepts of health economics and development.*
CO2: *They will also learn about the various determinants and indicators of health and health care market.*
CO3: *They will acquire knowledge about the economics of education in terms of human capital, demand and cost for education*
CO4: *They will have a better understanding about the issues related to the financing of education.*

Module I: Health Economics and Development

Rationale and Scope of Health Economics; Investment in Health; Health outcomes and their relationship with macroeconomic performance; Health and Productivity Relation: Empirical Evidence; Economics of Nutrition.

Module II: Determinants and Indicators of Health and Health care Market

Determinants of Health Status; Indicators of Health Status: Input and Output Indicators; Measures of Health Status: Disease Burden - DALY, QALY; Consequences of Gender Bias in Health; Concept of Missing Women; Linkages of Female Education with mortality and morbidity. Evolution of health care policies in India. Health Care Market**:** Demand for Health care – Grossman model of health demand; Supply of Health Care; Economics of Health Insurance: Market failure in health insurance and sources; Market of Pharmaceuticals

Module III: Introduction to Economics of Education

Concept and scope of Economics of Education; Education as consumption and investment goods; Role of education in Economic development, Human Capital - Human Capital Vs Physical Capital, Demand and Supply of Education; Cost of education - private costs and social cost, direct and indirect cost; Benefits of education-Direct and indirect benefits, private and social benefits; inequality in education; the Relationship between Employment Opportunities and Educational Demand.

Module IV: Financing of Education

Private versus public provision of education, Empirical evidence on the determinants of public versus private funding, Interactions between public and private sector, Centralization versus decentralization of educational finance, Fiscal federalism in education finance.

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

Suggested Readings:

- William, Jack (1999): Principles of Health Economics for Developing Countries, World Bank Publications.
- World Development Report (1993): Investing in Health, The World Bank.
- Ronald G., Ehrenberg and Robert S., Smith (2005) Modern Labour Economics: Theory and Public Policy, Addison Wesley
- Human Development Reports, Technical Notes: UNDP-various issues
- Michael P. Todaro & Stephen C. Smith (2005): Economic Development, Pearson Education
- Grossman, Michale (1999): The Human Capital Model of the Demand for Health, working paper, National Bureau of Economics Research, Cambridge
- Gerald M. Meier & James E. Rauch (2005): Leading Issues in Economic Development, Oxford University Press.
- George Psacharpoulos (1987): Economics of Education, Pergaman Press,
- Blaug, M. (1972): Introduction to Economics of Education, Penguin, London.
- Checchi, D, The Economics of Education, Cambridge University Press
- Johnes, G. and Johnes, J., (Ed.) International Handbook on the Economics of Education, Edward Elgar Publishing Ltd.

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Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

HEALTH ECONOMICS

Course Code: ECO/MJ-E/616

Learning Objectives: This course provides the theoretical foundations and economic evaluation of Health Economics. The main focus is the understanding of health issues and policies in a developmental perspective relating specifically to the financing, delivery, and efficiency of health systems. The course also attempts to evaluate policies in the context of market versus State provision of health care.

Course Outcomes:

CO1. Having studied this course student will be able to learn about different concepts of health economics such as demand for and supply of health care services.
CO2. Having studied this course students will be able to understand about the different models of health care financing.
CO3. Having studied this course student will be able to understood about public health economics.
CO4. The last module will try to explain about the health care approaches in India.

Module I: Demand and Supply of Health Care Services

Distinction between health and health care, Health as an Economic Good, Arrow's Perspective on Healthcare**.** Demand for Health Care: Utility and Health, Demand for Health care, Measuring price sensitivity with elasticities, The Grossman Model and Health Disparities Supply in Health care: Physicians as Health care Providers, Supply Induced Demand, Hospitals as Health care Providers, production and Cost of Healthcare, Profit maximization models in health care.

Module II: Financing Health care and Insurance in Health Care
The rationale of government funding and regulation of health care; Tax and Social Health Insurance, user charges and community financing schemes; issues of affordability and accessibility; Delivery of health care Private financing mechanisms and out of pocket expenditure on health, Uncertainty and Risk - Health Insurance, Patient Payments, Reimbursements, Information Economics in Health: Moral Hazard and Adverse Selection

Module III: Public Health Economics

Conceptual Foundations for health utility measurement-Preference based measures of health-Contingent valuation in health- Discrete choice experiments in health economics- stages and Validity of discrete choice variables. Economic evaluation in health Care-Cost-effectiveness analysis- Decision rules in economic evaluation.

Module IV: Health Approaches in India

Economic dimensions of health system in India-Health Indicators and outcomes - Nutritional concerns –Role of government in health care-Equity issues in health and health care systems - Social and gender inequalities - Social security measures-Health care in India- Health and population policies- Health sector reforms in India.

Suggested Readings:

- Bhattacharya, J., Hyde, T., & Tu, P. (2014). Health Economics. Palgrave Macmillan.
- Coelli, T. J., Rao, D. S. P., O'Donnell, C. J., & Battese, G. E. (2005). An introduction to efficiency and productivity analysis. Springer science & business media.
- Morris, S., Devlin, N., Parkin, D., & Spencer, A. (2012). Economic Analysis in Health Care (2nd ed.). Wiley.
- Zweifel, P., Breyer, F., & Kifmann, M. (2009). Health Economics (2nd ed.). Springer.
- Andrew M. Jones (ed)(2006): The Elgar Companion to Health Economics, Edward Elgar, USA.
- Glied S. and Smith P.C.(ed) (2011) : The Oxford Handbook of Health Economics, New York.
- Henderson, J.W. (2001): Health Economics and Policy, South –Western, Thomson Learning.
- Mcpake, B., L. Kumanayake and C. Normand (2002): Health Economics: An International Perspective, Routledge.
- Musgrove, P. (2004): Health Economics in Development, The World bank.
- Panchamukhi, P. R. (2002): Economics of Health: An Introductory Review. ICSSR
- World Health Organization(2011):A System of Health Accounts, WHO

GAME THEORY
Course Code: ECO/MJ-E/617

Learning Objective: *This course has been designed to impart the student extensive knowledge of game theory and its application in economic analysis.*

Course Outcomes:
CO1: The learners will learn types of games and its solution.
CO2: They will also learn about the concept of Nash equilibrium and its implication.
CO3: The learners will gain knowledge about the extensive form games and backward induction.
CO4: They will also acquire knowledge about the use of game theory in oligopoly market analysis.

Module I: Introduction to Game theory

Concepts- players, strategy, payoff, saddle point, value of the game; Types- two-person zero-sum game, non-zero-sum game, variable sum game, constant-sum game, cooperative and non-cooperative game; solution of a game with saddle point-pure strategy; rules of dominance; solution of a game without saddle point- mixed strategy

Module II: Nash Equilibrium and Prisoner' s dilemma

Nash equilibrium and its economic application, Prisoner' s dilemma and its economic application, Repeated games, Finitely repeated Prisoner's Dilemma and Infinitely repeated Prisoner's Dilemma.

Module III: The Extensive Form Games and Backward Induction

The Extensive form; Perfect information game; Backward induction and its application

Module IV: Game Theory and Oligopoly

Traditional tools of economic theory and decision making under oligopoly; Two person Zero-sum game - Certainty model, Uncertainty model; Two Person Non-zero-sum game and duopoly

Suggested Readings:

- Baumol, W. J., *Economic Theory and Operations Analysis*, PHI Learning Private Limited, New Delhi, 2010
- Parijat K. Dutta, *Strategies and Games*, The MIT Press, Cambridge, Massachusetts, London, England
- Koutsoyiannis, A., *Modern Micro Economics*, ELBS with Macmillan, Hong Kong
- Sharma, J. K., *Operations research Theory and Application*, Trinity, Delhi, 2016
- Taha, A. Hamdy, *Operations Research: An Introduction*, Prentice Hall of India Private Limited, New Delhi, 2002

ADVANCED ECONOMETRIC METHODS AND APPLICATION

Course Code: ECO/MJ-E/618

Learning Objective*:* This course has been designed to teach students some advance econometric analysis along with its handling with statistical packages.

Course Outcomes:

CO1: The learners will gain knowledge of about time series modelling.
CO2: They will get introduced panel data analysis.
CO3: The learners will learn about use of statistical packages in quantitative analysis in research in economics.
CO4: They will also acquire knowledge to write report based on econometric analysis.

Module I: Time Series Modelling

Univariate Time Series Modelling -Autocorrelation Function and Correlogram; Basic features of AR, MA, ARMA and ARIMA models; Trend versus Difference Stationary; Cointegration, Error Correction Mechanism; VAR and ARDL models

Module II: Introduction to Panel Data
Nature and Advantages of Panel Data; Fixed effect model and Random effect model; Housman Test; Diagnostic tests

Module III: Computer Application

Descriptive statistical analysis; Correlation analysis; Estimation of regression models –Linear, LOGIT, PROBIT, TOBIT; Handling of time series data and panel data
Module IV: Report Writing (Practice)
Writing of a report based on econometric analysis of data which will carry 20 marks in the final examination.

Suggested Readings:

- Gujarati, D.N. *Basic Econometrics*, McGraw Hill, New Delhi, 1995.
- Green, W. H. *Econometric Analysis*, fifth edition, Pearson Publication, 2009
- Johnston, J, *Econometric Methods*, McGraw Hill, Book Co., London, 1991.
- Johnson, R. A. and D.W. Wichern. *Applied Multivariate Statistical Analysis*, Fifth edition, PHI learning Pvt. Ltd., New Delhi, 2009.
- Koutsoyiannis, A., *Theory of Econometrics*, The MacMillan Press Ltd., London, 1977.Maddala, G.S., *Econometrics*, McGraw Hill, New York, 1999.
- Salvatore, Dominick and Derrick Reagle, *Statistics and Econometrics*, Schaum's Outline Series, Tata McGraw-Hill Publishing Company Limited, New Delhi, 2005.
- Stock, James H. and Mark W. Watson, *Introduction to Econometrics*, Pearson Education, 2004.
- Wooldridge, J. F. *Introductory Econometrics: A Modern Approach*, Third edition: South-Western Cengage Learning India, 2008.

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

POLITICAL ECONOMY OF EAST AND SOUTH EAST ASIA
Course Code: ECO/MJ-E/619

Learning Objectives: To identify the historical factors that shaped the development trajectories of East and Southeast Asia. Analyze the role of Special Economic Zones (SEZs) in China's integration into global trade. Explore the historical contexts of development in Southeast Asia, including colonization and independence movements. To explain the significance of geopolitical issues, such as the South China Sea disputes, in shaping development.

Course Outcomes:

CO1: The students will understand the historical, cultural, and geopolitical diversity of East and Southeast Asia.

CO2: It helps to explain the transformation of China's economy from a command to a market-oriented system and evaluate the role of Special Economic Zones and global integration in China's growth.

CO3: To identify the economic, political, and social factors shaping Southeast Asia's development and assess the role of ASEAN in fostering regional cooperation and growth.

CO4: It also helps students to analyze the geopolitical dynamics of East and Southeast Asia, including territorial disputes.

Module 1: Introduction to East and Southeast Asian Development

Overview of East and Southeast Asia: Geography, diversity, and historical significance, Colonialism, decolonization, and their impacts on development, Post-War reconstruction and early economic strategies. East Asia's High Growth - the strategies and the dynamics Competition and Development

Module II: Rise of China and India - comparatives and global implications

Transition from a command economy to a market-oriented model, Special Economic Zones (SEZs) and integration into global supply chains, The Belt and Road Initiative: Opportunities and controversies.

Module III: Southeast Asian Development and Regional Integration

Historical context: Colonization, independence, and Cold War alignments, Role of ASEAN in promoting economic cooperation, Contemporary challenges: Political instability, corruption, and inequality.

Module IV: Geopolitics and Regional Security

The South China Sea disputes and their impact on regional cooperation, U.S.-China competition and its implications for development, Regional organizations (ASEAN, ADB) and their role in ensuring stability, The impact of globalization and trade wars on the region.

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

Suggested Readings:

- *The East Asian Miracle: Economic Growth and Public Policy* by World Bank.
- *Developmental States in East Asia* by Gordon White.
- *China's Economy: What Everyone Needs to Know* by Arthur R. Kroeber.
- ADB (2011). *Asia 2050: Realizing the Asian Century*. Asian Development Bank.
- Campos, Jose Edgardo, and Hilton L. Root (1996). *The Key to the Asian Miracle: Making Shared Growth Credible.* Brookings.
- Cao, Tian Yu (ed.). (2005). *The Chinese Model of Modern Development.* Routledge.
- ERIA (2010). *Comprehensive Asia Development Plan.* Economic Research Institute for ASEAN and East Asia.
- Gill, Indermit, Yukon Huang, and Homi Kharas (eds.). (2007). *East Asian Visions : Perspectives on Economic Development.* World Bank.
- World Bank (1996): *The East Asian Miracle: Economic Growth and Public Policy*. Oxford University Press.

Head/विभागाध्यक्ष
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ENTREPRENEURIAL DEVELOPMENT
Course Code: ECO/MJ-E/620

Course Objectives:

1. To enable the students to understand the concept of Entrepreneurship and to learn the professional behavior expected of an entrepreneur.
2. To identify significant changes and trends which create business opportunities and to analyze the environment for potential business opportunities.
3. To provide conceptual exposure on converting idea to a successful entrepreneurial firm.

Outcomes:

On completion of syllabus student will understand on the basic concepts of entrepreneurship and business opportunities to familiars with knowledge about business and project reports for starting a new ventures on team based.

Module I: Entrepreneurship

Entrepreneur: Meaning of entrepreneurship – Types of Entrepreneurship – Traits of entrepreneurship – Factors promoting entrepreneurship- Barriers to entrepreneurship- the entrepreneurial culture- Stages in entrepreneurial process – Women entrepreneurship and economic development- SHG.

Module II: Developing Successful Business Ideas

Recognizing opportunities – trend analysis – generating ideas – Brainstorming, Focus Groups, Surveys, Customer advisory boards, Day in the life research – Encouraging focal point for ideas and creativity at a firm level-Protecting ideas from being lost or stolen – Patents and IPR.

Module III: Opportunity Identification and Evaluation

Opportunity identification and product/service selection – Generation and screening the project ideas – Market analysis, Technical analysis, Cost benefit analysis and network analysis- Project formulation – Assessment of project feasibility- Dealing with basic and initial problems of setting up of Enterprises.

Module IV: Business Planning Process

Meaning of business plan- Business plan process- Advantages of business planning- preparing a model project report for starting a new venture (Team-based project work). UNIT V: Funding Sources of Finance- Venture capital- Venture capital process- Business angles- Commercial banks- Government Grants and Schemes.

TEXT BOOKS:

- Reddy, Entrepreneurship: Text & Cases - Cengage, New Delhi.
- Kuratko/rao, Entrepreneurship: a south asian perpective.- Cengage, New Delhi.
- Leach/Melicher, Entrepreneurial Finance – Cengage. , New Delhi.
- K.Sundar – Entrepreneurship Development – Vijay Nicole Imprints private Limited
- Khanka S.S., Entrepreneurial Development, S.Chand & Co. Ltd., New Delhi, 2001.
- Sangeeta Sharma, Entrepreneurship Development, PHI Learning Pvt. Ltd., 2016.

REFERENCE BOOKS:

- Barringer, B., Entrepreneurship: Successfully Launching New Ventures, 3rd Edition, Pearson, 2011.

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

- Bessant, J., and Tidd, J., Innovation and Entrepreneurship, 2nd Edition, John Wiley &Sons, 2011.
- Desai, V., Small Scale Industries and Entrepreneurship, Himalaya Publishing House, 2011.
- Donald, F.K., Entrepreneurship- Theory, Process and Practice, 9th Edition, Cengage Learning, 2014.
- Hirsch, R.D., Peters, M. and Shepherd, D., Entrepreneurship, 6th Edition, Tata McGraw-Hill Education Pvt.Ltd., 2006.
- Mathew, J.M., Entrepreneurship Theory at Cross Roads: Paradigms and Praxis, 2nd Edition, Dream Tech, 2006.
- Morse, E., and Mitchell, R., Cases in Entrepreneurship: The Venture Creation Process, Sage South Asia, 2008.
- Nagendra and Manjunath, V.S., Entrepreneurship and Management, Pearson, 2010.
- Reddy, N., Entrepreneurship: Text and Cases, Cengage Learning, 2010.
- Roy, R., Entrepreneurship, 2nd Edition, Oxford University Press, 2011.
- Stokes, D., and Wilson, N., Small Business Management and entrepreneurship, 6th Edition, Cengage Learning, 2010.

E-RESOURCES:

- http://inventors.about.com/od/entrepreneur/
- http://learnthat.com/tag/entrepreneurship/
- www.managementstudyguide.com
- www.quintcareers.com
- www.entrepreneur.com

Research Project & Dissertation

Total Credit Hours: 300
Credit: 20 (L: 0; T: 0; P: 20)
Total Marks: 500
Distribution of Marks:

1. Preparation of Research Proposal/Synopsis (Credit: 4; Marks: 100)
2. Annotated Bibliography and Review paper in publishable form (Credit: 2; Marks: 50)
3. Mid-Project Progress Presentation (Credit: 2; Marks: 50)
4. Preparation of Dissertation (Credit: 8; Marks: 200)

Evaluation and Viva Voce (Credit: 4; Marks: 100)

About the Course:
In this paper, each student will choose a research topic in consultation with their supervisor. Students will conduct their fieldwork independently and come up with their dissertations under the supervision of a concerned teacher of the department. In the end, the dissertation will be evaluated by an expert, and a mark will be assigned, accordingly.

Course Objectives: The objective of this course typically revolves around guiding students through the process of conducting independent research and writing a scholarly dissertation.

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

1. To design and execute a well-structured research project, fostering critical thinking and independent inquiry.
2. Appropriate research methodologies, guiding them in the application of ethical and effective methods for data collection and analysis.
3. Critically engage with existing literature, identify knowledge gaps, and synthesize findings to support their research.
4. Analyse and interpret data using suitable tools, whether qualitative or quantitative and effectively present research findings.

Structure a well-organized dissertation and prepare them for the oral defence of their research work, fostering academic communication skills.

Timeline	**Research Activity**
Week 1-2	**Topic Finalization and Proposal Writing:** 1. Finalize the research problem or question after reviewing relevant literature. 2. Write a proposal outlining the objectives, research questions, and methodology. 3. Get approval from your supervisor or academic committee. Start collecting relevant academic articles, books, and reports related to the topic.
Week 3-4	**Literature Review and Research Design:** 1. Study the relevant literature in depth and identify the research gaps your study will address.

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

	2. Based on the literature review, refine your research questions and hypotheses (if applicable). 3. Define the research methods (qualitative, quantitative, or mixed), sample size, data collection tools (interviews, surveys), and timeline. Design questionnaires, interview guides, or observation protocols.
Week 5-6	**Fieldwork Preparation:** 1. Seek permission from local authorities, institutions, or tribal communities to conduct fieldwork. 2. Conduct a small pilot, if applicable, to test your research tools, and refine them based on feedback. 3. Plan travel, accommodation, and other logistical aspects for the fieldwork.
Week 7-9	**Field Visits and Data Collection:** 1. Visit the research site, interview participants, distribute surveys, and collect necessary data. 2. Keep detailed field notes or observations related to tribal practices, cultural expressions, or any relevant themes. Share progress with your supervisor, adjust plans if needed, and seek guidance on challenges in the field.
Week 10-11	**Data Analysis:** 1. Transcribe interviews, organize field notes, and input survey responses into software (if using quantitative methods). 2. Begin analyzing the data using appropriate methods (thematic analysis for qualitative data or statistical analysis for quantitative data). Start identifying patterns, themes, or correlations based on the data collected.
Week 12-14	**Drafting Chapters:** 1. Based on your earlier work, finalize the literature review section. 2. Describe your research design, methods of data collection, and analysis in detail. 3. Present your findings with evidence from the data. Use quotes, charts, or tables where necessary.

Head/विभागाध्यक्ष
Department of Economics
अर्थशास्त्र विभाग
Arunachal Pradesh University
Hill Top Pasighat (A.P) 791103

	4. Analyze the findings in relation to the research questions, literature, and hypotheses. 5. Summarize the key findings and discuss the implications for the field of Tribal Studies. Discuss any limitations encountered and suggest areas for further research.
Week 15	**Finalizing the Dissertation:** 1. Revise the draft for clarity, coherence, and grammar. Ensure that citations are properly formatted. 2. Compile all references in the required citation style. 3. Ensure the dissertation meets the formatting guidelines (margins, font, page numbering).
Week 16	**Final Submission:** 1. Get feedback from your supervisor on the draft, and make necessary revisions. 2. Submit the final dissertation to the department for evaluation.

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