

FYUGP SYLLABUS
ECONOMICS
 BODOLAND UNIVERSITY
Semester-wise Outline of the Courses

Year	Semester	Course	Code	Paper Title	Credit
First Year	I	Major	ECOMAJ1014	Introductory Microeconomics	4
		Minor	ECOMIN1014	Principle of Microeconomics-I	4
		IDC-1	ECOIDC1013	Introduction to Interdisciplinary Economics	3
		AEC-1	AEC1012	Language/ Regional Language	2
		SEC-1	ECOSEC1013	Economics of Sericulture	3
		VAC-1	ECOVAC1014	Sustainable Development -I	4
		Total Credit			
	II	Major	ECOMAJ1024	Intermediate Microeconomics-I	4
		Minor	ECOMIN1024	Principle of Microeconomics-II	4
		IDC-2	ECOIDC1023	Intermediate Interdisciplinary Economics	3
		AEC-2	AEC1022	Language/ Regional Language	2
		SEC-2	ECOSEC1023	Tourism Economics	3
		VAC-2	ECOVAC1024	Sustainable Development -II	4
		Total Credit			

SEMESTER - I

Paper Title: Introductory Micro Economics

Paper Code: ECOMAJ 1014

Credit Points: 4

Course Objectives: This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.

Learning Outcome: The course introduces the students to the first course in economics from the perspective of individual decision making as consumers and producers. The students learn some basic principles of microeconomics, interactions of supply and demand, and characteristics of perfect and imperfect markets.

Course Outline:

Unit 1: Introduction

Basic concepts- dependent and independent variables- exogenous and endogenous variable - The Economic Problem- Scarcity and Choice; Concepts of Equilibrium - Stable and Unstable, Static, Comparative Static, Dynamic, The Basic Market Model.

Unit 2: Consumer behavior

Utility: Cardinal versus Ordinal; Indifference Curve - Assumptions and Properties; optimal choice Consumer's Equilibrium; Price Effect-Income Effect, Substitution Effect; Engel's Curve; Derivation of the Demand Curve; Giffen Paradox; Merits and Limitations of Indifference Curve Analysis; Consumer's Surplus and Applications and Limitations of the Concept.

Unit 3: Theory of Production and Cost -I

Organisation of Production; Production Function and its related concepts; Total, Average and Marginal Products and the Law of Variable Proportions; Production with two variable inputs- isoquant; Factor Elasticity of Substitution; Types of Costs- Money Cost, Real Cost, Explicit Cost, Implicit Cost, Sunk Cost, Opportunity Cost, Private Cost, Social Cost.

Unit 4: Output Decisions and Profit Maximisation

Revenue: TR, AR, MR; Relation between AR, MR, Elasticity of Demand; Comparing Costs and Revenues to maximize Profit.

Suggested Readings:

1. Karl E. Case, Ray C. Fair, Principles of Economics, Pearson Education Asia
2. Dominick Salvatore, Micro Economics- Theory and Applications, Oxford University Press.

3. Koutsoyiannis. A, Modern Micro Economics, ELBS/ Macmillan.
4. Sampat Mukherjee, Modern Economic Theory, New Age International Publishers.
5. Rahul A. Shastri, Micro Economic Theory, University Press (India) Limited.
6. D. N. Dwivedi, Micro Economic Theory and Applications, Pearson Education.
7. R. K. Sharma and Shashi K. Gupta, Management Accounting- Principles and Practice, Kalyani Publishers.
8. G S Maddala and Ellen Miller, Micro Economic Theory and Application, Tata Mc Graw- HillM.
9. N. Gregory Mankiw (2007), Principal of Economics 6th Edn.thompson.
- 10.Hall R. Varian (2010). Intermediate Micro Economics: A Modern Approach.

SEMESTER - I

Paper Title: Principle of Micro Economics - I

Paper Code: ECOMIN 1014

Credit Points: 4

Course Objectives: This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.

Learning Outcome: The course introduces the students to the first course in Economics from the perspective of individual decision making as consumers and producers. The students learn some basic principles of microeconomics, Consumer Behaviour and Demand, Theory of Production and Cost, Product Pricing etc.

Course Outline:

Unit – I: Introduction

Basic concepts- dependent and independent variables- exogenous and endogenous variable - The Economic Problem- Scarcity and Choice; Concepts of Equilibrium - Stable and Unstable, Static, Comparative Static, Dynamic, The Basic Market Model.

Unit 2: Consumer Behaviour and Demand

Consumer Behaviour: Cardinal Approach Indifference Curves- Assumptions and properties, Law of Marginal Rate of Substitution, Consumer's Equilibrium, Income Effect, Substitution Effect, Price Effect, Derivation of Demand Curve, Giffen Paradox, Merits and Limitations of Indifference Curve Analysis; Consumer's Surplus and Applications and Limitations of the Concept.

Unit - 3: Theory of Production and Cost

Law of Variable Proportions; Returns to Scale, Isoquants, Iso-Cost, Least Cost Input Combination, Expansion Path; Contract Curve and the derivation of Production Possibility Curve; Cost of Production; Types of Costs- Money Cost, Real Cost, Explicit Cost, Implicit Cost, Sunk Cost, Opportunity Cost, Average and Marginal Cost Curves; Economics and diseconomies of Scale.

Unit – 4: Product Pricing

Pricing under Perfect completion; Equilibrium of Firm and Industry; Derivation of Supply Curve; Price output determination Monopoly, Price Discrimination, Price and output under Product Differentiation, Basic ideas of Oligopoly.

Suggested Readings:

1. Karl E. Case, Ray C. Fair, Principles of Economics, Pearson Education Asia
2. Dominick Salvatore, Micro Economics- Theory and Applications, Oxford University Press
3. Koutsoyiannis. A, Modern Micro Economics, ELBS/ Macmillan
4. Sampat Mukherjee, Modern Economic Theory, New Age International Publishers
5. Rahul A. Shastri, Micro Economic Theory, University Press (India) Limited
6. D. N. Dwivedi, Micro Economic Theory and Applications, Pearson Education
7. R. K. Sharma and Shashi K. Gupta, Management Accounting- Principles and Practice, Kalyani Publishers
8. G S Maddala and Ellen Miller, Micro Economic Theory and Application, Tata Mc Graw-Hill
9. N. Gregory Mankiw (2007), Principles of Economics 6th Edn. Thompson
10. Hall R. Varian (2010). Intermediate Micro Economics: A Modern Approach.

SEMESTER - I

Paper Title: INTRODUCTION TO INTERDISCIPLINARY ECONOMICS

Paper Code: ECOIDC1013

Credit Points: 3

Course Description: The course aims to provide students with a strong foundation in interdisciplinary economics, equipping them with the analytical and critical thinking skills necessary to understand and address complex economic issues in various contexts.

Course objectives:

To Understand the importance of interdisciplinary perspectives in analysing economic phenomena. Apply microeconomic principles to analyse individual decision-making and market behaviour. Analyse macroeconomic variables and their impact on the overall economy. Identify different market structures and their implications for competition.

Course Outcomes:

Evaluate economic issues related to the environment and natural resources. Analyse international trade patterns and the impact of globalization on economies. Assess the effectiveness of economic policies and their implications for society. Apply economic models and empirical analysis to assess policy outcomes.

Course Outlines:

Unit 1: Foundations of Interdisciplinary Economics

Introduction to Interdisciplinary Economics; Principles of Microeconomics; Principles of Macroeconomics.

Unit 2: Interdisciplinary Dimensions of Economics;

Economic History and Development;
Quantitative Methods for Economic Analysis
Behavioral Economics

Unit 3: Applied Interdisciplinary Economics;

Environmental Economics
International Economics
Economic Policy Analysis

Note: Each unit will cover multiple topics within the respective subject area, providing a comprehensive understanding of interdisciplinary economics.

Recommended Readings:

The Economic Way of Thinking" by Paul Heyne, Peter J. Boettke, and David L. Prychitko
Economics: The User's Guide" by Ha-Joon Chang
Economics in One Lesson" by Henry Hazlitt
Interdisciplinary Economics: Kenneth E. Boulding's Engagement in the Sciences" edited by Paul Dragos Aligica and Kenneth J. Boulding
The Oxford Handbook of Interdisciplinarity" edited by Robert Frodeman, Julie Thompson Klein, and Carl Mitcham.

SEMESTER - I

Paper Title: ECONOMICS OF SERICULTURE

Paper code: ECOSEC1013

Credit 3

Objective: Studying the economics of sericulture involves analyzing the economic aspects and implications of silk production, including the costs, benefits, and market dynamics associated with the sericulture industry

Outcome: Course outcomes for studying the economics of sericulture may vary depending on the level of study (undergraduate or postgraduate) and the specific curriculum. However, some common course outcomes may include the Knowledge of sericulture economics, comprehensive understanding of the economic principles, theories, and concepts related to sericulture, including production costs, market structures, pricing strategies, and supply chain dynamics.

Unit-1: Sericulture: An overview

Introduction to Sericulture: Origin and history of sericulture. Silk route and map of India and World; Temperate and tropical climate for sericulture practice; Meaning of Sericulture, Types of Sericulture as a source of employment and income; Demand and Supply of Silk.

Unit-2: Investment analysis

Investment Analysis in Sericulture, Cost – Fixed Cost and Variable cost in three cultures, return from sericulture; Profit from sericulture; Silk Industry, Spinning, Reeling and weaving, Cost, Revenue and Profit.

Unit -3: Environmental impact of sericulture

Environmental impact of sericulture: Eco-friendly activity of sericulture; Employment generation in sericulture and role of women in sericulture; Industrial aspect of the industry; Silk reeling as a cottage industry; Handloom and power loom activities.

Unit – 4: Types of fibers and govt's role

Textile fibers: Natural and Synthetic fibers: Advantage of silk fiber over other fibers: International demand of silk. Function Central Silk Board; Role of State Department of Sericulture (Assam and BTR); Role of universities and NGOs in sericulture development;

Various Government schemes for Sericulturist, bank loan and Subsidy. Prospects and problems of sericulture industry in Assam with special reference to BTR.

Reference Readings:

Chowdhury, S.N., Eri Silk Industry, Directorate of Sericulture and Weaving, Government of Assam.

Chowdhury, S.N., Muga Silk Industry, Directorate of Sericulture and Weaving, Government of Assam.

Manjit Das, Sericulture and Sericulture in Assam: An Economic Analysis, Tushar Publishing House, Guwahati.

Sengupta .K. Tasar Silk Industry in India, CRT & TI, CSB , Ranchi.

Sarkar. D.C. Sericulture in India, Central Silk Board, Ministry of Textile, Government of India.

Thangavelu, K and Borah .H, Sericulture, Central Silk Board, Ministry of Textile, Bangalore, Government of India.

Ullal , S.R. and Narasimhana, hand book of Practical Sericulture, Central Silk Board, Ministry of Textile, Government of India.

Ullal , S.R. and Narasimhana, M.N. , Handbook of Practical Sericulture, Central Silk Board, Ministry of Textile, Bangalore, Government of India.

SEMESTER-I

Paper Title: SUSTAINABLE DEVELOPMENT -I

Course- Value Added Course

Code- ECOVAC1014

Credit Points: 4

Course Description: Explore the principles and practices of sustainable development and environmental economics. Analyse the economic aspects of environmental issues and strategies for achieving a balance between economic growth, social well-being, and environmental protection.

Course Outcomes: By the end of this course, students will be able to: Understand sustainable development and environmental economics. Analyse the economic implications of environmental issues. Evaluate economic instruments and policy tools for sustainable development. Identify opportunities for sustainable economic growth. Critically evaluate environmental policy frameworks. Develop strategies for promoting sustainable development.

Course Objectives: To understand the relationship between economic development, social well-being, and environmental sustainability. To analyse the economic implications of environmental issues and externalities. To evaluate policy tools and instruments for promoting sustainable development. To develop strategies for sustainable solutions, including sustainable economic growth and effective environmental governance.

Course Outlines:

Unit 1: Introduction to Sustainable Development and Environmental Economics (1 credit:)

Definition and principles of sustainable development; Relationship between environmental economics and sustainable development; Key sustainability challenges and the need for environmental economics.

Unit 2: Economic Analysis of Environmental Issues(1 credit)

Economic implications of environmental degradation and resource depletion; Externalities and market failures in environmental problems; The role of economic analysis in understanding environmental issues.

Unit 3: Valuation of Environmental Goods and Services(1 credit)

Methods for valuing environmental resources; Cost-benefit analysis for evaluating environmental projects and policies; Limitations and challenges of valuing environmental goods and services;

Unit 4: Identification and Assessment of Local Resources(1 credit)

Identifying the diverse range of local resources in BTR (natural, cultural, economic).; Evaluating the environmental impacts and challenges associated with these resources.

Recommended Readings:

Environmental Economics and Sustainable Development by Timothy M. Swanson and Anastasios Xepapadeas.

Principles of Environmental Economics and Sustainability by Ahmed Hussen.

Economics of the Environment: Selected Readings" edited by Robert N. Stavins.

Sustainable Development: Principles, Frameworks, and Case Studies by OkechukwuUkaga.

Local Sustainable Development and Global Environmental Governance by John Callebaut and Arnold Tukker.

Sustainable Resource and Environmental Management" by Simon Bell and Stephen Morse.

Ecotourism and Sustainable Development: Who Owns Paradise? by Martha Honey.

Sustainable Energy: Choosing Among Options by Jefferson W. Tester et al.

SEMESTER - II

Paper Title: INTERMEDIATE MICRO ECONOMICS - I

Paper Code: ECOMAJ 1024

Credit Points: 4

Course Objectives: The course is designed to provide a sound training in microeconomic theory to formally analyze the behaviour of individual agents. Since students are already familiar with the quantitative techniques in the previous semesters, mathematical tools are used to facilitate understanding of the basic concepts. This course looks at the behaviour of the consumer and the producer and also covers the behaviour of a competitive firm.

Learning Outcome: The course trains the students of Economics about the basic elements of consumer theory and production theory and the functioning of the competitive markets. This course aims to give students a solid grasp of microeconomic analysis at the intermediate-level using mathematical techniques where appropriate.

Course Outline:

Unit-1: Consumer Theory Revisited

Preference; utility; budget constraint; choice; demand; Slutsky equation; buying and selling; (iii) Choice under risk: Describing Risk, Preferences towards risk, reducing risk, the demand for Risky assets-the trade-off between Risk & Return(iv) Revealed Preference – the weak axiom and substitution effect.

Unit- 2: Cost Functions

Definition and types of Costs, Cost Functions and its Properties, Shift in Cost Curves; Cost in the Short-Run and Long-Run; Long-Run versus Short-Run Cost Curves; the relationship between short run and long run cost curves; Impact of Economies and diseconomies of scale.

Unit – 3: Theory of Production and Cost –II

Returns to Scale and Returns to Factors; Least cost input combination; Expansion Path; Contract Curve and the derivation of Production Possibility Curve; Technical Progress and Production Functions- Cobb – Douglas, CES production Function.

Unit -4: Market Structure and the Theory of Product Pricing -I

Price Determination under Perfect Competition; Monopoly: Determination of Price - Output Equilibrium, Degrees of Monopoly Power, Price discrimination, Multi –plant Monopoly, peak-load pricing, Monopoly and Anti Trust Policies, Monopsony, Hidden action & hidden information and monopoly solution. Signaling.

Suggested Readings:

1. Hal R. Varian, Intermediate Microeconomics, a Modern Approach, W.W. Norton and Company/Affiliated East-West Press (India), 8th edition, 2010. The workbook by Varian and Bergstrom may be used for problems.
2. C. Snyder and W. Nicholson, Fundamentals of Microeconomics, Cengage Learning (India), 2010.
- 3.1. B. Douglas Bernheim and Michael D. Whinston, Microeconomics, Tata McGraw- Hill (India), 2009.

SEMESTER - II

Course Title: PRINCIPLE OF MICRO ECONOMICS - II

Paper Code: ECOMIN1024

Credit Points: 4

Course Objectives: This course is designed to expose the students to the basic principles of microeconomic theory. The emphasis will be on thinking like an economist and the course will illustrate how microeconomic concepts can be applied to analyze real-life situations.

Learning Outcome: The course introduces the students to the first course in Economics from the perspective of individual decision making as consumers and producers. The students learn some basic principles of microeconomics, Consumer theory, Theory of factor pricing and welfare economics.

Unit-1: Consumer Theory

Preference; utility; budget constraint; choice; demand; Slutsky equation; buying and selling; choice under risk and intertemporal choice; revealed preference.

Unit-2: Determination of Factor Pricing

Pricing of Factors under Perfect Competition–Factor Share and Technical Progress- Backward Bending Supply Curve of Labour–Monopsony; Principal agent problem-Monopoly & Competitive solution; Hidden action & hidden information and monopoly solution; Signaling

Unit: 3: Welfare Economics:

Positive, Normative and Welfare Economics, Individual and Social Welfare, Pigovian Welfare Economics, Condition of Pareto Optimality, The Compensation Principle (Kaldor – Hicks Criterion),

Unit: 4: General Equilibrium

Meaning of General Equilibrium, Partial vs General Equilibrium, Walrasian General Equilibrium System: Tatonnement, Existence, Stability and Uniqueness of the Equilibrium. Critique of General Equilibrium Theory – Non–tatonnement Process

Suggested Readings:

1. Hal R. Varian, Intermediate Microeconomics, a Modern Approach, W.W. Norton and Company/Affiliated East-West Press (India), 8th edition, 2010. The workbook by Varian and Bergstrom may be used for problems.
2. C. Snyder and W. Nicholson, Fundamentals of Microeconomics, Cengage Learning (India), 2010.
1. B. Douglas Bernheim and Michael D. Whinston, Microeconomics, Tata McGraw- Hill (India), 2009.

SEMESTER - II

Paper Title: INTERMEDIATE TO INTERDISCIPLINARY ECONOMICS

Paper Code: ECOIDC1023

Credit Points: 3

Course Objectives: To analyse and apply economic analysis to understand and address environmental challenges, including the efficient management of natural resources. To understand the theory of comparative advantage and gains from trade. To apply economic analysis to understand innovation and technological change to comprehend the drivers and effects of innovation and technological advancements in various sectors of the economy

Learning Outcome: This syllabus provides an outline of the course "Intermediate to Interdisciplinary Economics" and can be adjusted or expanded based on specific curriculum requirements and preferences of the educational institution offering the course.

Course outline:

Unit 1: Environmental and Resource Economics

Economic analysis of environmental issues and natural resource management; Evaluation of environmental policies and their economic implications; Cost-benefit analysis of environmental projects and regulations.

Unit 2: International Trade and Finance

Theory of comparative advantage and gains from trade; International trade patterns and barriers; Exchange rates, balance of payments, and global financial markets.

Unit 3: Innovation and Entrepreneurship

Economic analysis of innovation and technological change; Role of entrepreneurship in economic growth and development; Policies for fostering innovation and entrepreneurship.

Recommended Readings:

Environmental and Natural Resource Economics" by Tom Tietenberg and Lynne
International Economics: Theory and Policy" by Paul Krugman and Maurice Obstfeld
The Entrepreneurial State: Debunking Public vs. Private Sector Myths" by Mariana Mazzucato
The Economics of Innovation" by William F. Baumol

SEMESTER - II

Course Title: TOURISM ECONOMICS

Code: ECOSEC1023

Credit Points: 3

Objectives: studying tourism economics involves analyzing the economic aspects of the tourism industry, including its impact on local economies, businesses, and governments. The objectives of studying tourism economics are to understand the economic principles and factors that influence the development and growth of the tourism sector, as well as to analyze its economic impact and implications

Outcome: Overall, studying tourism economics equips individuals with the knowledge and skills to understand, analyze, and contribute to the sustainable development of the tourism industry from an economic perspective.

Unit-1: Introduction

Economics of Tourism: Definitions, Meaning, Subject-matter, Nature and Social Relations.

Unit-2: Economic and social significance

Benefits to the state, Educational and cultural value of tourism, Costs –Benefits from Tourism.

Unit 3: Tourism Development:

The organizations of Tourism, Organization for economic Cooperation and Development, Tourists organizations in India. Thomas Cook as travel Agents, Role of the travel agency and income generation

Unit -4: Tourism in India

Early history, ancient civilization, Tourist products, Tourist publicity, Employment Generation, Spot development in BTAD areas, their importance and problems.

Recommended Readings:

1. Bhatia A.K. (2005), "Tourism Development, Principle & Practices" Sterling publisher private limited
2. Chatopadhyay Kunal," Economic impact of Tourism development in Indian Experience, Kanishka publishers & distributors.
3. B.Ghosh, Tourism and travel management.
4. A.K. Bhatia, "International tourism managements"

SEMESTER-II

Course Title: SUSTAINABLE DEVELOPMENT -II

Course- Value Added Course

Code- ECOVAC1024

Credit Points: 4

Course Description: Explore the principles and practices of sustainable development and environmental economics. Analyse the economic aspects of environmental issues and strategies for achieving a balance between economic growth, social well-being, and environmental protection.

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

Understand sustainable development and environmental economics. Analyse the economic implications of environmental issues. Evaluate economic instruments and policy tools for sustainable development. Identify opportunities for sustainable economic growth. Critically evaluate environmental policy frameworks. Develop strategies for promoting sustainable development.

Course objectives:

To understand the relationship between economic development, social well-being, and environmental sustainability. To analyse the economic implications of environmental issues and externalities. To evaluate policy tools and instruments for promoting sustainable development. To develop strategies for sustainable solutions, including sustainable economic growth and effective environmental governance.

Course Outlines:

Unit 1: Economic Instruments and Policy Tools for Sustainable Development (1 Credit; 4 classes)

Overview of economic instruments (taxes, subsidies, cap-and-trade); Policy tools for sustainable development (regulations, standards); Evaluation of the effectiveness of different policy approaches.

Unit 2: Sustainable Development and Business Practices (1 Credit; 4 classes); The role of businesses in promoting sustainability; Corporate social responsibility and green marketing; Economic opportunities and challenges of sustainable business models.

Unit 3: Strategies for Promoting Sustainable Development (1 Credit; 4 classes)

Integrating sustainable development principles in various sectors; Examples of successful sustainable development initiatives; Action plans for promoting sustainable development at different levels;

Unit 4: Sustainable Utilization of Local Resources (1 Credit; 4 classes)

Exploring sustainable agricultural practices tailored to BTR's environmental conditions.; Promoting community-based ecotourism and its economic benefits in BTR.; Sustainable forestry practices and the conservation of local forest resources in BTR.; Examining renewable energy options suitable for BTR's energy needs

Recommended Readings:

Environmental Economics and Sustainable Development by Timothy M. Swanson and Anastasios Xepapadeas.

Principles of Environmental Economics and Sustainability by Ahmed Hussien.

Economics of the Environment: Selected Readings" edited by Robert N. Stavins.

Sustainable Development: Principles, Frameworks, and Case Studies by Okechukwu Ukaga.

Local Sustainable Development and Global Environmental Governance by John Callebaut and Arnold Tukker.

Sustainable Resource and Environmental Management" by Simon Bell and Stephen Morse.

Ecotourism and Sustainable Development: Who Owns Paradise? by Martha Honey.

Sustainable Energy: Choosing Among Options by Jefferson W. Tester et al.

FYUGP SYLLABUS
ECONOMICS
 BODOLAND UNIVERSITY
Semester-wise Outline of the Courses

Year	Semester	Course	Code	Paper Title	Credit
Second Year	III	Major	ECOMAJ2014	Intermediate Microeconomics-II	4
			ECOMAJ2024	Introductory Macroeconomics	4
		Minor	ECOMIN2014	Principle of Macroeconomics-I	4
		IDC-3	ECOIDC2013	Contemporary Economic Issues	3
		AEC-3	AEC2012	Language/Regional Language	2
		SEC-3	ECOSEC2013	Data analysis	3
		Total Credit			
	IV	Major	ECOMAJ2034	Intermediate Macroeconomics-I	4
			ECOMAJ2044	Statistical Methods for Economics	4
			ECOMAJ2054	Development Economics-I	4
		Minor	ECOMAJ2024	Principle of Macroeconomics-II	4
		AEC-4	AEC2022	Language/Regional Language	2
				Internship	2
		Total Credit			

SEMESTER - III

Course Title: INTERMEDIATE MICRO ECONOMICS - II

Paper Code: ECOMAJ 2014

Credit Points: 4

Course Objectives: This course is a sequel to Intermediate Microeconomics I. The emphasis will be on giving conceptual clarity to the student coupled with the use of mathematical tools and reasoning. It covers welfare Economics, imperfect markets, Pricing of Factors and Distribution and topics under economics of market failure

Learning Outcome: This course helps the students to understand efficiency of markets and the environment where the standard market mechanism fails to generate the desirable outcomes. The issues of market imperfection and market failures are important building blocks of this course.

Course Outline:

Unit: 1 : Welfare Economics:

Positive, Normative and Welfare Economics, Individual and Social Welfare, Pigovian Welfare Economics, Condition of Pareto Optimality, The Compensation Principle (Kaldor – Hicks Criterion), Scitovsky's Double Criterion; Bergson – Samuelson Social Welfare Function; Arrow's condition on Social Choice and Individual values.

Unit 2: Pricing of Factors and Distribution

Marginal Productivity Theory of Distribution – Wage Differentials – Ricardian Theory of Rent – Classical theory of Interest – Theories of Profit-Innovation theory of Profit, Risk and Uncertainty bearing theory of profit.

Unit -3: Market Structure and the Theory of Product Pricing –II

Monopolistic Competition: Determination of Price - Output Equilibrium, Degrees of Product Differentiation, Selling costs, Excess Capacity; Oligopoly Analysis of Classical Oligopoly Model (Cournot, Bertrand) Collusive Oligopoly and Price Leadership & Prisoners' dilemma in cartel stability, Nash equilibrium of game.

Unit 4: Market Failure

Externalities: Positive and Negative Externality and Inefficiency, Externalities and Property Rights: Property Rights, Bargaining and Economic Efficiency; Public goods: Non-rival and Non Exclusive goods; Efficiency and Public Goods; Private preferences for public Goods; Ways of Correcting Market Failure, Markets with Asymmetric Information: Quality Uncertainty and the Market for Lemons, Moral Hazards and adverse selection, Asymmetric Information in Labour Markets: Efficiency Wage Theory.

Suggested Readings:

1. Hal R. Varian, Intermediate Microeconomics, a Modern Approach, 8th edition, W.W. Norton and Company/Affiliated East-West Press (India), 2010.
2. C. Snyder and W. Nicholson, Fundamentals of Microeconomics, Cengage Learning (India), 2010.
2. Dominick Salvatore, Micro Economics- Theory and Applications, Oxford University Press.
3. Koutsoyiannis. A, Modern Micro Economics, ELBS/ Macmillan.
6. D. N. Dwivedi, Micro Economic Theory and Applications, Pearson Education.

SEMESTER - III

Course Title: INTRODUCTORY MACROECONOMICS

Paper Code: ECOMAJ 2024

Credit Points: 4

Course Objective: The objective of this course is to introduce undergraduate students to the basic principles and concepts of macroeconomics. The course will focus on the study of the behaviour of the economy as a whole, including issues such as economic growth, inflation, unemployment, monetary and fiscal policy, and international trade.

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

- Understand the basic introductory macroeconomics
- Analyse macroeconomic data
- Apply macroeconomic models
- Understand the relationship between money-banking and inflation-unemployment.

Course Outline:

Unit 1: Introduction to Macroeconomics

Definition and scope of macroeconomics; basic macroeconomic concepts and principles; macroeconomic goals and policy tools.

Unit 2: Measuring Economic Performance

National Income accounting and measurement; Gross Domestic Product and its components; Inflation and its measurement

Unit 3: Money and Banking

Money and its functions; Banking and financial intermediation; The Central Bank and monetary policy.

Unit 4: Unemployment and Inflation

The Labour market and unemployment; Types of Inflation and their causes; Philips curve and inflation-unemployment trade-off.

Recommended Readings:

Gupta, Suraj B: Monetary Economics, S. Chand and Co. Ltd
Mankiw, N. G. (2014). Principles of Macroeconomics. Cengage Learning
Dornbusch, R., Fischer, S., & Startz, R. (2013). Macroeconomics. McGraw-Hill Education
Blanchard, O., Johnson, D. R., & Johnson, D. W. (2015). Macroeconomics (6th ed.). Pearson
Ahuja, H.L.: Macroeconomics, Theory and Policy, S. Chand and Co. Ltd
Rana and Verma: Macroeconomic analysis, Vishal Publications, Jalandhar
Ray, D. (2015). Development Economics. Princeton University Press

SEMESTER - III

Course Title: PRINCIPLE OF MACROECONOMICS-I

Paper Code: ECOMIN2014

Credit Points: 4

Course Description: This course is an introduction to the fundamental principles of macroeconomics. The course will cover topics such as national income accounting, the measurement of economic growth, inflation, unemployment, monetary and fiscal policies, and international trade. Students will learn how to analyze macroeconomic data, apply macroeconomic models, and evaluate macroeconomic policies

Course Objectives: To introduce students to the basic principles of macroeconomics. To familiarize students with the tools and techniques used in macroeconomic analysis. To provide students with an understanding of key macroeconomic concepts such as national income accounting, economic growth, inflation, unemployment, and international trade. To enable students to analyse macroeconomic data and apply macroeconomic models. To develop students' ability to evaluate macroeconomic policy

Course Outline:

Unit 1: Introduction to Macroeconomics

Definition and scope of macroeconomics; Basic macroeconomic concepts: GDP, inflation, unemployment, etc.; The circular flow of income and expenditure; The role of government in the economy

Unit-2: National Accounting

The measurement of GDP; The components of GDP- consumption, investment, government spending, net export; Limitations of GDP as a measure of economic well-being

Unit-3: Economic Growth

The sources of economic growth; the role of technology in economic growth; the measurement of economic growth, The determinants of long-run economic growth

Unit 4: Inflation and Unemployment

The measurement of inflation and unemployment; The costs of inflation and unemployment; The Phillips curve and the trade-off between inflation and unemployment; The role of monetary and fiscal policies in stabilizing the economy

Recommended Readings:

Mankiw, N. G. (2019). Principles of Macroeconomics. Cengage Learning.

Macroeconomics: Principles, Applications, and Tools by Arthur O'Sullivan, Steven Sheffrin, and Stephen Perez

Principles of Macroeconomics by N. Gregory Mankiw

Macroeconomics by Robert J. Gordon

SEMESTER - III

Course Title: CONTEMPORARY ECONOMIC ISSUES

Paper Code: ECOIDC2013

Credit Points: 3

Objectives: The paper seeks to familiarize the students with basic concepts related to some contemporary Indian economic issues.

Outcomes: Its aim is to equip the students with sufficient knowledge and skills so as to understand media discussions, and to critically analyze contemporary issues. Such capability is necessary to understand government policies and also to increase people's participation in economic decision-making. The emphasis in this paper will be on conceptual understanding only.

1. Concepts

- a. Growth and Development: GDP, GNP, HDI.
- b. Fiscal policy, need for government spending, areas of government spending in India
- c. Capital expenditure, revenue expenditure, plan expenditure, non-plan expenditure.
- d. Deficits (budget, fiscal, revenue), impact of fiscal deficit on economy, need to control fiscal deficits,
- e. Capital receipts, revenue receipts, tax and non-tax revenue, direct and indirect taxes, need to rationalize tax structure. Goods and Services Tax (GST).
- f. Actuals, Revised Estimates, Budget Estimates
- g. Zero-base budgeting
- h. Gender budgeting
- i. Centre-state financial relations in India
- j. Demonetisation

2. The Union Budget

Need for the Budget, Understanding the process of budget making in India, Analysis of budget in terms of various parameters such as:

- a) Deficits — trends in fiscal deficit and revenue deficit
- b) Receipts- proposed sources of revenue and expected growth in revenue;
- c) Expenditure - expenditure pattern and expected growth in expenditure; The thrust areas of the budget; areas/sectors which have received higher or lower share of expenditure, reasons and consequences there of; steps proposed to ensure effective pending.

Recommended readings:

1. 'Understanding the Budget Concepts and Terminologies', Centre for Budget and Governance Accountability <http://www.cbeaindia.org/files/documents/Understanding>

- [u%20the%20Budget%20Concepts%20and%20Terminologies.pdf](#)
2. *The Key to Budget Documents, Budget At A Glance, Macroeconomic Framework Statement, Medium Term Fiscal Policy Statement and Fiscal Policy Strategy Statement*, all available at indiabudget.nic.in.
 3. *Economic and Social Classification of the Budget*, available at <http://finmin.nic.in/reports/FunClass201415.pdf>.
 4. <http://www.unionbudget.nic.in/ub2016-17/bh/bh1.pdf> (For Budget 2016-17 highlights)
 5. PranabMukherjee(2012),“BudgetMaking”,inK.BasuandA.Maertens(eds),*The New Oxford Companion to Economics in India*,OUP.
 6. DipakDasguptaandSupriyoDe(2012),“FiscalDeficit”,inBasuandMaertens.
 7. UmaKapila(2016),“FiscalandBudgetaryDevelopments”,in*Indian Economy Since Independence*, Academic Foundation, latest edition.
 8. YVReddy(2015),“Continuity,ChangeandTheWayForward:Fourteenth Finance Commission”, EPW Vol. 50, Issue No. 21, 23 May,2015
 9. 14th Finance Commission Report.
<http://finmin.nic.in/14fincomm/14thFinanceCommission.htm>
 10. Chakraborty,Pinaki(2015)“IntergovernmentalFiscalTransfersinIndia: Emerging Trends and Realities” in P. Patnaik (ed), *Economics Volume 3. Macroeconomics*, Oxford University PressIndia.
 11. Mukherjee,Sacchidananda(2015).“PresentStateofGoodsandServices Tax(GST) ReforminIndia,”WorkingPaperNo.2015-154(September2015),NationalInstitute of Public Finance and Policy, NewDelhi.
 12. M.R.Spiegel(2003),*TheoryandProblems of ProbabilityandStatistics*,ch.19.

SEMESTER - III

Course Title: DATA ANALYSIS

Paper Code: ECOSEC 2013

Credit Points: 3

Objectives: Data analysis serves various objectives and can yield several outcomes depending on the context and purpose of the analysis. it includes Understanding particular phenomenon, process, or system by exploring and examining the available data, Decision-making, Problem-solving and Prediction and forecasting.

Outcomes: Data analysis can lead to new insights, discoveries, or hypotheses that were previously unknown or not apparent, helping to expand knowledge and understanding.

Unit-1: Collection of Data, secondary data and primary data, different sources of secondary data, different methods of primary data collection, preparation of questionnaire and schedule.

Unit-2: Measure of central tendency-mean, median, mode; measure of dispersion-range, quartile deviation, standard deviation, measurement of growth rate.

Unit-3: Correlation, Coefficient of Correlation, Rank correlation, Regression analysis.

Unit-4: Data Entry in Excel, Diagrammatic representation and Analysis; Power Point Presentation; Concepts of statistical tools like Excel, R, SPSS, STRATA, SAS.

Recommended Readings:

Gupta, SP *Statistical Methods*, Sultan Chand and Sons, New Delhi.

Gujrati, D. N. (2004), *Basic Econometrics, Fourth Edition*, Tata Mc Graw-Hill Publishing Company Limited, New Delhi.

Gupta, S.C. and Kapoor, VK, *Fundamentals of Mathematical Statistics*, Sultan Chand and Sons, New Delhi.

Gupta, S.C. and Kapoor, VK, *Fundamentals of Applied Statistics*, Sultan Chand and Sons, New Delhi.

SEMESTER IV

Course Title: INTERMEDIATE MACROECONOMICS-I

Course- Major

Code- ECOMAJ2034

Credit Points: 4

Course Description: This course is designed to provide students with a deeper understanding of macroeconomic theory and its application to real-world issues. The course will cover topics such as the determinants of long-run economic growth, the business cycle, monetary policy, and fiscal policy. Students will learn how to analyse macroeconomic models and theories, and evaluate macroeconomic policies.

Course Objectives: To develop a deeper understanding of macroeconomic theory. To Apply macroeconomic models and theories in real-world issues. To evaluate the macroeconomic policies and to study the business cycle and its impact on the economy. To examine the role of monetary and fiscal policy in the economy.

Learning Outcomes: By the end of the course, students will be able to: Understand the key concepts and theories of macroeconomics. Analyze and evaluate macroeconomic models and theories. Apply macroeconomic concepts to real-world economic issues. Understand the relationship between macroeconomics and other fields of study, such as finance and public policy.

Course Outline:

Unit 1: Introduction to Intermediate Macroeconomics

Review of basic macroeconomic concepts; Introduction to intermediate macroeconomic models; The circular flow of income and expenditure in the long run.

Unit 2: The Business Cycle

Theories of the business cycle; Empirical evidence on business cycles; The role of expectations in business cycles; Monetary and fiscal policies for stabilizing the economy.

Unit 3: Monetary Policy

The role of money in the economy; Money demand and supply; The conduct of monetary policy; The challenges of implementing effective monetary policy.

Unit 4: Fiscal Policy

The role of government in the economy; The government budget constraint; The impact of fiscal policy on aggregate demand; The effectiveness and limitations of fiscal policy.

Recommended Readings:

Romer, D. (2012). Advanced Macroeconomics (4th ed.). McGraw-Hill.

Macroeconomics by N. Gregory Mankiw

The Macroeconomy: Private Choices, Public Actions, and Aggregate Outcomes by Frederic S. Mishkin

Macroeconomic Theory and Policy by David Andolfatto and Simon Fraser University

Principles of Macroeconomics by Karl E. Case and Ray C. Fair

Advanced Macroeconomics by David Romer

SEMESTER IV

Course Title: STATISTICAL METHODS FOR ECONOMICS

Course: Major

Code: ECOMAJ 2044

Credit Points: 4

Course Objectives: The course teaches students the basics of probability theory and statistical inference. It sets a necessary foundation for the econometrics courses within the Honours programme. The familiarity with probability theory will also be valuable for courses in advanced microeconomic theory.

Learning Outcome: At the end of the course, the student should understand the concept of random variables and be familiar with some commonly used discrete and continuous distributions of random variables. They will be able to estimate population parameters based on random samples and test hypotheses about these parameters. An important learning outcome of the course will be the capacity to analyse statistics in everyday life to distinguish systematic differences among populations from those that result from random sampling.

Unit-1: Introduction and Overview

Meaning and Scope of statistics; Data: Collection, Organization and Presentation.

Unit-2: Statistical Measures

Measures of Central Tendency -- Mean, Median and Mode; Weighted Mean, Geometric and Harmonic means, Measures of Dispersion – Range, Mean Deviation, Quartile Deviation, Standard Deviation, Coefficient of Variation and Lorenz curve; Moments, Skewness and Kurtosis, Symmetrical Vs. Asymmetrical distribution.

Unit- 3: Correlation and Linear Regression Model

Correlation Analysis: Meaning and Types, Coefficient of linear correlation; Scatter diagram, Karl Pearson's correlation coefficient and Spearman's Rank method, Partial & Multiple Correlation coefficient; Regression Analysis – estimation of regression line in a bi-variate distribution - Least Square Method, properties of regression coefficient.

Unit – 4: Elementary Probability Theory

Probability: Concepts of Sample Space and Events, Probability of an Event, Addition and Multiplication Theorems; Conditional Probability and Independence of Events; Inverse Probability; Bayes' Rule (concepts only) ; Concept of a Random Variable, Discrete and Continuous Random Variable, Probability Mass Function, Probability Density Function, Mathematical Expectation and Its Properties.

Suggested Readings:

1. Gupta, S. C. (2011). Fundamentals of statistics (pp. 18-1). New Delhi: Himalaya Publishing House.
2. Gupta, S. C., & Kapoor, V. K. (2020). Fundamentals of mathematical statistics. Sultan Chand & Sons.
3. Bluman, A. G. (2013). Elementary statistics: A step by step approach: A brief version (No. 519.5 B585E.). McGraw-Hill.
4. Berenson, M. L., Stephan, D. F., Krehbiel, T. C., & Levine, D. M. (2011). Statistics for Managers using MS Excel. Pearson Higher Ed.
5. Sharma, J. K. (2010). Fundamentals of Business Statistics. (2nd ed.). New Delhi: Vikas Publishing House.
6. Nagar, A.L. and Das, R.K (1983), Basic Statistics, Second Edition, Oxford University Press.

SEMESTER IV

Paper Title: DEVELOPMENT ECONOMICS I

Paper code: ECOMAJ2054

Credit:4

Objective: The objective of this paper is to help student acquire the conceptual knowledge of economic growth and development.

Course Learning Outcome: The course will enable the student to understand the theoretical framework of economic growth and development. It will also help them to learn about the entrepreneurship, technology and economic development, poverty and inequality. Besides that it will enable the students to gather knowledge of the various models of economic growth and development.

Unit-1: Concepts of Economic Growth and Development

Economic growth and development-Concepts, indicators of economic development-PCI, PQLI, HDI, PQLI, Sen's views on development, Challenges and solution to development, Characteristics of modern economic growth.

Unit-2: Entrepreneurship, Technology and Economic Development

Entrepreneurship- Role of entrepreneurship in economic development; Problems and measures in the growth of entrepreneurship; Technological change, Role of technology in economic development; Technology transfer and its problems.

Unit-3: Poverty and Inequality: Definitions, Measures and Mechanisms

Inequality axioms and measurement; Connections between inequality and development; Poverty and measurements; Mechanism that generate poverty trap.

Unit-4: Growth models and Empirics

Vicious Circle of Poverty; Theory of Big Push; Theory of Balanced and Unbalanced Growth; Endogenous Growth model; Determinants of Growth.

Recommended Readings:

1. Debraj Ray, *Development Economics*, Oxford University Press, 2009
2. Michael P. Todaro and Stephen C. Smith, *Economic Development*, Pearson
3. R. K. Lekhi & Joginder Singh, *The Economics of Development and Planning*, Kalyani Publishers
4. Thirlwal, AP, *Growth and development*, Palgrave.
5. UNDP-development challenges and solutions (<https://www.undp.org>)

SEMESTER IV

Course Title: PRINCIPLE OF MACROECONOMICS-II

Course- Minor

Code- ECOMIN2024

Credit Points: 4

Course Description: This course is a continuation of Principles of Macroeconomics-I, focusing on more advanced topics in macroeconomics. The course will cover topics such as economic growth, business cycles, monetary policy, fiscal policy, and international economics. Students will learn how to apply macroeconomic models and theories to analyse current economic issues and policies.

Course Objectives: To build on the knowledge gained in Principles of Macroeconomics-I, and introduce more advanced concepts and topics in macroeconomics.

To deepen students' understanding of macroeconomic theories and their application to real-world issues and policies.

To provide students with analytical tools to study topics such as economic growth, business cycles, monetary and fiscal policies, and international economics.

To enable students to apply macroeconomic models and theories to analyse current economic issues and policies.

To develop students' ability to evaluate macroeconomic policies and their impact on economic performance.

Learning Outcomes: By the end of the course, students will be able to: Understand the advanced principles of macroeconomics; Analyse macroeconomic models and theories; Evaluate macroeconomic policies and their effectiveness; Apply macroeconomic concepts to real-world economic issues.

Course Outline:

Unit 1: Economic Growth and Development

Theories of economic growth; Endogenous growth theory; Sources of economic development; Measuring development and its challenges.

Unit 2: Business Cycles

Theories of business cycles; Measuring business cycles; Fiscal and monetary policies for stabilizing the economy; The role of expectations in business cycles.

Unit 3: Monetary Policy

Money demand and supply; The role of central banks in monetary policy; Transmission mechanisms of monetary policy; The challenges of implementing effective monetary policy.

Unit 4: Fiscal Policy

The role of government in the economy; The impact of fiscal policy on aggregate demand; The government budget constraint; The effectiveness and limitations of fiscal policy.

Unit 5: International Economics

The gains from trade; The theory of comparative advantage; Trade policies and their impact on welfare; Exchange rates and the balance of payments.

Recommended Readings:

Blanchard, O., & Johnson, D. R. (2019). *Macroeconomics* (8th ed.). Pearson.

Mankiw, N. G. (2019). *Principles of Macroeconomics*. Cengage Learning.

Macroeconomics: Principles, Applications, and Tools by Arthur O'Sullivan, Steven Sheffrin, and Stephen Perez

Principles of Macroeconomics by N. Gregory Mankiw

Macroeconomics by Robert J. Gordon.

FYUGP SYLLABUS
ECONOMICS
 BODOLAND UNIVERSITY
Semester-wise Outline of the Courses

Year	Semester	Course	Code	Paper Title	Credit
Third Year	V	Major	ECOMAJ3014	Intermediate Macroeconomics-II	4
			ECOMAJ3024	Mathematical Methods for Economics-I	4
			ECOMAJ3034	Development Economics-II	4
			ECOMAJ3044	Population Studies	4
		Minor	ECOMIN3014	Money and Banking	4
		Total Credit			
	VI	Major	ECOMAJ3054	Indian Economy-I	4
			ECOMAJ3064	Public Economics	4
			ECOMAJ3074	International Economics	4
			ECOMAJ3084	Mathematical Methods for Economics-II	4
		Minor	ECOMIN3024	Issues of Indian Economy	4
		Total Credit			

SEMESTER-V

Course Title: INTERMEDIATE MACROECONOMICS-II

Course- Major

Code- ECOMAJ3014

Credit Points: 4

Course Description: This course is a continuation of Intermediate Macroeconomics-I and will cover more advanced topics in macroeconomic theory and policy. The course will focus on topics such as dynamic macroeconomic models, monetary and fiscal policy in open economies, and the relationship between macroeconomics and financial markets. Students will learn how to analyse macroeconomic models and theories, and evaluate macroeconomic policies in a dynamic setting.

Course Objectives: To. develop advanced understanding of macroeconomic theory and policy. Analyse macroeconomic models and theories in a dynamic setting. Evaluate macroeconomic policies in open economies. Understand the relationship between macroeconomics and financial markets.

Learning Outcomes: By the end of the course, students will be able to: Understand the advanced concepts and theories of macroeconomics; Analyse and evaluate dynamic macroeconomic models; Apply macroeconomic concepts to real-world economic issues; Understand the relationship between macroeconomics and financial markets; Evaluate macroeconomic policies in open economies.

Course Outline:

Unit 1: Dynamic Macroeconomic Models

The IS-LM model in a dynamic setting; The Phillips curve in a dynamic setting; The role of expectations in dynamic macroeconomic models; Rational expectations and the Lucas critique.

Unit 2: Monetary and Fiscal Policy in Open Economies

The open economy IS-LM model; The Mundell-Fleming model; The relationship between exchange rates and interest rates; International transmission of monetary and fiscal policies.

Unit 3: Macroeconomics and Financial Markets

The money market and the loanable funds market; The impact of monetary policy on interest rates; The impact of fiscal policy on interest rates; The relationship between interest rates and asset prices.

Unit 4: Economic Growth and Development

Theories of economic growth-The Solow growth model; Endogenous growth model; Human capital and technological progress; The challenges of economic development; The role of macroeconomic policies in promoting economic growth and development.

Recommended Readings:

Burda, M., & Wyplosz, C. (2017). *Macroeconomics: A European Text* (7th ed.). Oxford University Press.

Dynamic Macroeconomic Analysis: Theory and Policy in General Equilibrium by Sumru Altug and Pamela Labadie.

International Macroeconomics by Maurice Obstfeld and Kenneth Rogoff.

Macroeconomics: Imperfections, Institutions and Policies by Wendy Carlin and David Soskice.

Macroeconomics: Principles and Policy by William J. Baumol and Alan S. Blinder.

Monetary Policy, Inflation, and the Business Cycle: An Introduction to the New Keynesian Framework and Its Applications by Jordi Galí

SEMESTER-V

Course Title: MATHEMATICAL METHODS FOR ECONOMICS - I

Course: Major

Code: ECOMAJ 3024

Credit Points: 4

Course Objectives: This is the first of a compulsory two-course sequence. The objective of this sequence is to transmit the body of basic mathematics that enables the study of economic theory at the undergraduate level, specifically the courses on microeconomic theory, macroeconomic theory, statistics and econometrics set out in this syllabus. In this course, particular economic models are not the ends, but the means for illustrating the method of applying mathematical techniques to economic theory in general. The level of sophistication at which the material is to be taught is indicated by the contents of the prescribed textbook.

Learning Outcome: The course hones and upgrades the mathematical skills acquired in school and paves the way for the second semester course Mathematical Methods in Economics I. Collectively, the two papers provide the mathematical foundations necessary for further study of a variety of disciplines including economics, statistics, computer

Science, finance and data analytics. The analytical tools introduced in this course have applications wherever optimization techniques are used in business decision-making. These tools are necessary for anyone seeking employment as an analyst in the corporate world. The course additionally makes the student more logical in making or refuting arguments.

Unit -1: Preliminaries

Logic and proof techniques; sets and set operations; Functions and Relations: Definitions; Concepts of 'range', 'domain' and 'mapping'; Explicit and implicit functions; elementary types of functions: quadratic, polynomial, power, exponential, logarithmic; convex, quasi – convex and concave functions, limit and continuity of functions

Unit – 2: Differential Calculus

Differentiation of a function, Basic rules of differentiation, Partial and Total differentiation, second and higher order derivatives for single variable, Economic applications of Derivative: Derivatives in elasticity of demand and supply, relationship of MR, AR and Elasticity, Relationship between AC and MC, Relationship between Marginal Product and Marginal Cost , Derivation of Marginal Functions, Comparative Static Analysis of Market Model, Comparative Static Analysis in a National Income Model, Application of Euler's Theorem.

Unit -3: Single-variable optimization

Geometric properties of functions: convex functions, distinction between concave and convex functions; their characterizations and applications; local and global optima: tests for maximization and minimization, geometric characterizations, characterizations using calculus and applications. Applications: Equilibrium under cardinal utility theory; Maximization of Revenue and Profit, Minimization of cost of production in short run.

Unit – 4: Simultaneous Linear Systems and Related Applications of Matrix Algebra

Vectors, Vector Spaces; Linear Dependency; Matrix; Types, Matrices-elementary operations: matrix addition, subtraction, scalar multiplication, rank of a matrix, determinants: characterization, properties and applications, inverse of a matrix, Solution of Simultaneous equation system: Application of Cramer 's rule for solution of a system of linear equations, Application to Partial Equilibrium Market Model, Simple National Income Model.

Suggested Readings:

1. Chiang, A.C. & Wainwright, K. (2013). Fundamental Methods of Mathematical Economics. (4th ed.). McGraw Hill Education (India) Private Limited, 4th Edition.
2. Sydsaeter, K. & Hammond, P. (2016). Mathematics for Economic Analysis. New Delhi: Pearson Education Inc.
3. Dowling, E. T. (2012). Schaum's Outlines-Introduction to Mathematical Economics. (3rd ed.). New York: McGraw Hill.
4. Simon, C. P., & Blume, L. (1994). Mathematics for economists (Vol. 7). New York: Norton.
5. Rosser, M. (2003). Basic Mathematics for Economists. (2nd ed.). New York: Routledge.
6. Renshaw, G. (2011). Maths for Economics. (4th ed.). Oxford. Oxford University Press.
7. Baruah Srinath (2019) . Basic Mathematis and its Application in Economics, Trinity Press (An Imprint of Laxmi publication Pvt. Ltd.), India.

SEMESTER-V

Course Title:DEVELOPMENT ECONOMICS II

Paper code: ECOMAJ3034

Credit: 4

Objective: The objective of this paper is to help student acquire the conceptual knowledge of economic growth and development and to understand role of demography, health and education, environment and trade in economic development.

Learning Outcome: The course will enable the student to understand the theoretical framework of economic growth and development. It will also help them to learn about the demography, health and education, environment and trade, in economic development. Besides that, it will enable the students to gather knowledge of the globalize perspective of economics development.

Course Outline:

Unit-1: Demography and Development

Basic concepts of demography- Birth and death rate, age structure, fertility and mortality; Demographic transitions during the process of development; The Malthusian Population Trap; Migration-Rural and Urban; Harris-Todaro Model of Migration

Unit-2: Health, Education and Development

Investment in health and education-the Human Capital Approach; Gender bias in health and education; Role of health and education in economic development;

Unit-3: Environment, Trade and Development

Sustainable development-concepts and indicators; Policies for sustainable development; Green Growth and Green Accounting; Relationships between environment and development; Gains from Trade, Vent for Surplus Theory of Trade, Trade as an engine of Growth

Unit-4: Globalization and Development

The Economics and Politics of Multilateral Agreements; Production Pattern and World inequality; Financial Instability in a globalized world; Effects of globalization on development

Recommended Readings:

1. Debraj Ray, *Development Economics*, Oxford University Press, 2009
2. Michael P. Todaro and Stephen C. Smith, *Economic Development*, Pearson
3. R. K. Lekhi& Joginder Singh, *The Economics of Development and Planning*, Kalyani Publishers
4. Thirlwal, AP, *Growth and development*, Palgrave.

SEMESTER-V

Course Title: Population Studies

Paper code: ECOMAJ3044

Credit: 4

Course Objectives: Population studies are a multidisciplinary field of research that aims to understand various aspects of human populations, including their size, composition, distribution, and dynamics. Some common objectives of population studies includes demographic Analysis, fertility and Family Dynamics, Migration and Urbanization and Policy Development etc.

Course Outcome: The outcomes of population studies contribute to scientific knowledge, inform policymaking, and support evidence-based decision-making. By understanding population dynamics, researchers and policymakers can develop targeted interventions, allocate resources efficiently, and address societal challenges related to population growth, aging, urbanization, and social inequalities.

Course Outline:

Unit 1: Concepts and Basic Theories

The Malthusian Theory of Population—Theory of Optimum Population—Theory of Demographic Transition, source of population data

Unit 2: Elements of Vital Statistics

Measure of Fertility—Crude Birth Rate, Fertility Rate, Age Specific Fertility Rate, Measures of Reproductivity—Total Fertility Rate, Gross Reproduction Rate, Net Reproduction Rate—Measure of Mortality—Crude Death Rates, Age Specific Death Rates.

Unit-III Urbanization

Urbanization –Growth and distribution of rural–urban population in India, forces of urbanization in developed and developing countries, trends in urbanization in India,

Unit-IV Migration

Importance of migration in the study of population, internal and international migration-concept-determinant and consequences. migration modal- todaro's model of rural-urban migration

Recommended Readings:

1. Bhende, A and T. Kanitkar: Principles of Population Studies
2. Gupta and Kapoor: Fundamental of Applied Statistics
3. Ramkumarr, R : Technical Demography
4. Gupta, S.K and R. Joshi: Human Resource Management
5. Sinha, V.C and Zacharia, E: Elements of Demography

SEMESTER-V

Course Title: MONEY AND BANKING

Course- Minor

Code- ECOMIN3014

Credit Points: 4

Course Description: This course aims to provide students with an understanding of the nature, functions, and significance of money and banking in the modern economy. The course will cover topics such as the evolution of money, the role of banks in the economy, the central banking system, and the impact of monetary policy on economic growth and stability.

Course Objectives: To provide students with an understanding of the nature and functions of money in the modern economy. To introduce students to the evolution of money, from its origins to the modern financial system. To analyse the role of banks in the economy and how they facilitate the flow of funds between savers and borrowers. To explore the central banking system and the role of central banks in regulating the money supply and maintaining economic stability. To assess the impact of monetary policy on economic growth and stability, and the challenges posed by inflation and deflation.

Learning Outcomes: Understand the nature and functions of money in the modern economy. Analyse the historical evolution of money and its current role in the financial system. Explain the role of banks in facilitating the flow of funds between savers and borrowers. Evaluate the central banking system and the role of central banks in regulating the money supply and maintaining economic stability. Assess the impact of monetary policy on economic growth and stability, and the challenges posed by inflation and deflation.

Course Units and Credits:

Unit 1: Introduction to Money (1 Credit)

Definition and functions of money; Types of money: commodity, fiat, and digital; Evolution of money: from barter to digital.

Unit 2: Banking and Financial Intermediation (1 Credit)

The role of banks in the economy; Types of banks: commercial, investment, and central banks; Financial intermediation: deposit creation and lending.

Unit 3: Central Banking and Monetary Policy (1 Credit)

The central banking system: structure and functions; Monetary policy tools: reserve requirements, discount rate, and open market operations. The transmission mechanism of monetary policy.

Unit 4: International Finance and the Global Monetary System (1 Credit)

Exchange rates and the foreign exchange market; The gold standard, Bretton Woods, and the current global monetary system; The role of the International Monetary Fund (IMF).

Recommended Readings:

Mishkin, F. (2016). The Economics of Money, Banking, and Financial Markets (11th Edition). Pearson.

The Economics of Money, Banking and Financial Markets" by Frederic S. Mishkin

Money, Banking and Financial Markets" by Stephen G. Cecchetti and Kermit L. Schoenholtz

The Theory of Monetary Institutions" by Lawrence H. White.

Money, Bank Credit, and Economic Cycles" by Jesús Huerta de Soto.

SEMESTER-VI

Course title: INDIAN ECONOMY-I

Course: Major

Code: ECOMAJ3054

Credit Points: 4

Course Objective: Students will gain a comprehensive understanding of the economic structure, functioning, and policies of India. It involves analyzing various aspects such as macroeconomic indicators, sectors of the economy, policy frameworks, and socio-economic factors that shape India's economic development.

Course outcome: It will equip students with a strong understanding of the economic dynamics of India, enabling them to contribute effectively to policy-making, research, business decisions, and socio-economic development in the country

Course Description: Using appropriate analytical frameworks, this course reviews major trends in economic indicators and policy debates in India in the post-Independence period, with particular emphasis on paradigm shifts and turning points. Given the rapid changes taking place in India, the reading list will have to be updated annually.

Course Outline:

Unit-1: Economic Development since Independence

Major features of the economy at independence; population - the factor endowment's approach to development. Growth and Development under different policy regimes (from planning to market based development)- Objectives, achievements and failures of Planning. Economic Reforms - critical analysis. Structural changes in the post reforms period- trends in National income and per capita income.

Unit-2: Population and Human Development

Demographic trends and issues; Population as a factor of economic development; Age and sex composition; The quality of population; Demographic Dividend; education; health and malnutrition; basic problems and government measures, Right to Education (RTE) Act 2009

Unit-3: Growth and Distribution

Trends and policies in poverty including Sen's Entitlement Analysis, inequality and unemployment, the State and social programmes, Trends in GDP and per capita GDP; Youth unemployment (School Transition to Work); Policy perspectives in growth and distribution

Unit-4: International Comparisons

With China, Pakistan, Bangladesh, Sri Lanka, Nepal and Vietnam

Recommended Readings:

1. Jean Dreze and Amartya Sen, Jean Dreze and Amartya Sen, 2013. An Uncertain Glory: India and its Contradictions, Princeton University Press.
2. Pulapre Balakrishnan, 2007, The Recovery of India: Economic Growth in the Nehru Era, Economic and Political Weekly, November.
3. Rakesh Mohan, 2008, —Growth Record of Indian Economy: 1950-2008. A Story of Sustained Savings and Investment, Economic and Political Weekly, May.
4. S.L. Shetty, 2007, —India 's Savings Performance since the Advent of Planning, in K.L. Krishna and A. Vaidyanathan, editors, Institutions and Markets in India's Development.
5. Himanshu, 2010, Towards New Poverty Lines for India, Economic and Political Weekly, January.
6. Jean Dreze and Angus Deaton, 2009, Food and Nutrition in India: Facts and Interpretations, Economic and Political Weekly, February.
7. Himanshu. 2011, —Employment Trends in India: A Re-examination, Economic and Political Weekly, and September
8. Uma Kapila: Indian Economy since independence, Academic Foundation
9. Misra and Puri: Indian economy, Himalaya Publishing House Pvt. Ltd.

SEMESTER-VI

Course Title: PUBLIC FINANCE

Course code: ECOMAJ3064

Credit: 4

Course Objective: studying public finance is to develop a comprehensive understanding of the government's role in managing public funds, allocating resources, and making fiscal policy decisions. It involves analyzing various aspects of public finance, such as taxation, government expenditures, public debt, budgeting, and the impact of fiscal policies on the economy and society.

Course outcome: Overall, studying public finance equips students with a deep understanding of the principles, policies, and practices related to government finance. It enables them to analyze fiscal issues, contribute to policy debates, and make informed decisions regarding public finance management at various levels of government.

Course Outline:

Unit1 Public Economic Theory

Public finance: definition, nature and scope, private and public finance, role of public finance; Fiscal policy: meaning, objectives, instruments; Public goods: definition, types, models of efficient allocation, free riding, Externalities: the problem and its solutions, taxes versus regulation; Taxation: meaning, types, economic effects, a good tax system, efficiency and equity considerations, tax incidence;

Unit 2 Public expenditure

Public expenditure: meaning, causes of growth of public expenditure. Public debt: meaning, reasons for growing public debt. Theories of Public Expenditure- Lindhal's Model of Voluntary Exchange, Musgrave's Optimum Budget Theory

Unit-3 Public Debt

The Neo-classical Theory of Incidence and Shifting, Musgrave's Budget Incidence Theory
Public Debt- sources, burden and effects, Optimality in Public Debt Management Pay- As- You- Use and Pay- As- You-go Finance, Musgrave's Intergeneration Equity Theory.

Unit 4 Indian Public Finance

Tax system in India: structure and reforms; Budget deficits and public debt; Fiscal federalism in India.

Recommended Readings:

1. J. Hindrinks, G. Myles: *Intermediate Public Economics*, MIT Press, 2006.
2. H. Rosen, T. Gayer: *Public Finance*, 9th ed., McGraw-Hill/Irwin, 2009.
3. Joseph E. Stiglitz, *Economics of the Public Sector*, W.W. Norton & Company, 3rd edition, 2000.
4. R.A. Musgrave and P.B. Musgrave, *Public Finance in Theory & Practice*, McGraw Hill Publications, 5th edition, 1989.
5. John Cullis and Philip Jones, *Public Finance and Public Choice*, Oxford University Press, 1st edition, 1998.
6. Harvey Rosen, *Public Finance*, McGraw Hill Publications, 7th edition, 2005.
7. Mahesh Purohit, *Value Added Tax: Experiences of India and Other Countries*, 2007.
8. R.K Choudhury, *Public Finance and Fiscal Policy*, Kalyani Publishers, 2000.

SEMESTER-VI

Paper Title: INTERNATIONAL ECONOMICS

Course: Major

code: ECOMAJ3074

Credit:4

Course Objectives: Studying international economics aims to understand the principles and theories governing economic interactions among countries. It involves analyzing the global flow of goods, services, and capital and the policies and factors that influence international trade and finance. By studying international economics, individuals can gain insights into the functioning of the global economy and its impact on various stakeholders, including nations, businesses, and individuals.

Learning outcome: It will equip individuals with analytical tools and a broad understanding of the global economy. It provides insights into the complexities of international economic relations and prepares students for careers in areas such as international business, economic consulting, government agencies, and international organizations.

Course Outline:

Unit-1 Introduction to International Economics

Definition and scope of international economics; Key concepts and theories in international trade and finance; Historical development of international economic relations

Unit 2. International Trade Theory

Comparative advantage and gains from trade; Ricardian, Heckscher-Ohlin, and specific factors models; Trade Patterns and factors Influencing trade flows; Trade policy analysis: tariffs, quotas, subsidies, and trade agreements.

Unit 3. International Trade Policy

Trade barriers and protectionism; Arguments for and against free trade; Trade policy instruments: tariffs, non-tariff barriers, and trade remedies; International trade organizations: World Trade Organization (WTO) and regional trade agreements.

Unit 4. International Macroeconomic Policy

Fixed versus flexible exchange rates; International Monetary systems, financial globalization and financial crisis.

Recommended Readings:

1. Paul Krugman, Maurice Obstfeld, and Marc Melitz, International Economics: Theory and Policy, Addison-Wesley (Pearson Education Indian Edition), 9th edition, 2012
2. Dominick Salvatore, International Economics: Trade and Finance, John Wiley International Student Edition, 10th edition, 2011.

SEMESTER-VI

Paper Title: MATHEMATICAL METHODS FOR ECONOMICS-II

Course Code: ECOMAJ3084

Credit: 4

Objectives: Studying mathematical economics involves the application of mathematical methods and models to analyze economic theories, phenomena, and problems. The objectives and outcomes of studying mathematical economics can include formalization of economic theories, Optimization and decision-making etc.

Outcomes: Overall, studying mathematical economics equips individuals with a strong quantitative foundation and analytical toolkit, enabling them to analyze economic phenomena, develop models, make predictions, and contribute to economic research and policy analysis.

Unit -1. Derivatives of Functions of several variables:

Partial and Total differentiation and economic applications, Comparative –Static Analysis of Market Model, Comparative –Static Analysis in a National Income Model, Indifference curve analysis, Application of Euler’s Theorem, Cobb-Douglas Production Function and its Properties; CES Production Function and its properties

Unit - 2. Unconstrained optimization:

Unconstrained optimization with one variable and Economic Applications: Profit Maximisation and Cost Minimisation, Revenue Maximisation;

Unconstrained optimization with more than one variable and economic applications - Discriminating Monopoly, Multiproduct Firm, Multi –Plant Firm.

Unit – 3: Integration of functions

Meaning and significance of integration, basic rules of integration, significance of a constant after integration, Indefinite and Definite Integral; Applications: derivatives of total functions (total cost, total revenue, consumption and saving functions) from marginal functions, consumer’s surplus and producer’s surplus, problems relating to investment and capital formation.

Unit – 4. Linear programming:

Introduction, graphical solution and economic interpretation.

Recommended Readings

1. Chiang, A.C. & Wainwright, K. (2013). Fundamental Methods of Mathematical Economics. (4th ed.). McGraw Hill Education (India) Private Limited, 4th Edition.

2. Sydsaeter, K. & Hammond, P. (2016). Mathematics for Economic Analysis. New Delhi: Pearson Education Inc.
3. Dowling, E. T. (2012). Schaum's Outlines-Introduction to Mathematical Economics. (3rd ed.). New York: McGraw Hill.
4. Simon, C. P., & Blume, L. (1994). Mathematics for economists (Vol. 7). New York: Norton.
5. Rosser, M. (2003). Basic Mathematics for Economists. (2nd ed.). New York: Routledge.
6. Renshaw, G. (2011). Maths for Economics. (4th ed.). Oxford. Oxford University Press.
7. Baruah Srinath (2019) . Basic Mathematis and its Application in Economics, Trinity Press (An Imprint of Laxmi publication Pvt. Ltd.), India.

SEMESTER-VI

Course Title: ISSUES OF INDIAN ECONOMY

Course- Minor

Code: ECOMIN3024

Credit Points: 4

Objective: Students will gain a comprehensive understanding of the economic structure, functioning, and policies of India. It involves analyzing various aspects such as macroeconomic indicators, sectors of the economy, policy frameworks, and socio-economic factors that shape India's economic development.

Course outcome: It will equip students with a strong understanding of the economic dynamics of India, enabling them to contribute effectively to policy-making, research, business decisions, and socio-economic development in the country

Unit-1: Macroeconomic Policies and Their Impact

Fiscal Policy; Trade and investment policy; Financial and monetary policies; Inflation and measures to control inflation; Labour laws and regulation.

Unit-2: Policies and Performance in Agriculture

Growth; productivity; agrarian structure and technology; capital formation; Agricultural marketing; Food security and food policy; Pricing and procurement; WTO and Indian agriculture

Unit-3: Policies and Performance in Industry

Output, employment and productivity growth; Small scale industries- problems and prospects and its contribution in national economy; Public sector; competition policy; Foreign direct investment in industry; Economic reform and industry; Industrial stagnation and crisis of the Indian economy.

Unit-4: Trends and Performance in Services

Formal and informal sectors; Banking and insurance; Trade in services

Recommended Readings:

1. Shankar Acharya, 2010, —Macroeconomic Performance and Policies 2000-8, I in Shankar Acharya and Rakesh Mohan, editors, India's Economy: Performances and Challenges: Development and Participation, Oxford University Press.
2. Rakesh Mohan, 2010, —India 's Financial Sector and Monetary Policy Reforms, I in Shankar Acharya and Rakesh Mohan, editors, India's Economy: Performances and Challenges: Development and Participation, Oxford University Press.
3. Pulapre Balakrishnan, Ramesh Golait and Pankaj Kumar, 2008, —Agricultural Growth in India Since 1991, RBI DEAP Study no. 27.
4. B.N. Goldar and S.C. Aggarwal, 2005, —Trade Liberalisation and Price-Cost Margin in Indian Industries, The Developing Economics, September.
5. P. Goldberg, A. Khandelwal, N. Pavcnik and P. Topalova, 2009, —Trade Liberalisation and New Imported Inputs, American Economic Review, Papers and Proceedings, May.
6. Uma Kapila: Indian Economy since independence, Academic Foundation

FYUGP SYLLABUS
ECONOMICS
 BODOLAND UNIVERSITY
Semester-wise Outline of the Courses

Year	Semester	Course	Code	Paper Title	Credit
Fourth Year	VII	Major	ECOMAJ4014	Introductory Econometrics	4
			ECOMAJ4024	Indian Economy-II	4
			ECOMAJ4034	Money and Financial Market	4
			ECOMAJ4044	Environmental Economics-I/	4
			ECOREM4044	Research Methodology	4
		Minor	ECOMIN4014	Public Finance	4
	Total Credit				20
	VIII	Major	ECOMAJ4054	History of Economic Thought	4
			ECOMAJ40112	Dissertation / Research Project	12
			Or <i>Advanced Level Course in lieu of Dissertation</i>		
			ECOADL4014	Advanced Econometrics	4
			ECOADL4024	Agricultural Economics	4
			ECOADL4034	Environmental Economics-II	4
		Minor	ECOMIN4014	The Economy of North East India	4
	Total Credit				20

SEMESTER VII

Paper name: INTRODUCTORY ECONOMETRICS

Paper code: ECOMAJ4014

Credit:4

Objective: To enable students to learn about the use of statistical and econometric tools for research and analysis using them. This course would just be a beginner to introduce them to the world of research.

Course outcome: the learners will be equipped with the basic statistical and econometric tools for analysis and research in economic studies.

1. Review of statistical concepts [Credit 1, Class 15]

Population and sample, sampling, types of sampling, errors in sampling, Hypothetical testing, types of errors and power of a test. Statistical tests: t-test, F-test, chi-square

2. Introduction to Econometrics [Credit 1, Class 15]

Definition & scope, Nature and its goals, Methodology of Econometrics,

3. Simple Linear Regression Model [Credit 1, Class 15]

Assumption, estimation (OLS), Gauss-Markov theorem (BLUE properties), goodness of fit, standard error, confidence interval, testing of regression coefficient, maximum likelihood method(concept)

4. Multiple Regression[Credit 1, Class 15]

Multiple regression model (k variables), Gauss-Markov theorem (BLUE properties), goodness of fit and adjusted r square, Problems and solutions (example)

Recommended Readings:

1. GMK Madnani, Introduction to econometrics, Oxford & IBH publishing
2. D Gujrati, Basic Econometrics, McGraw Hill series
3. Jaydeb Sarkhel, Basic Econometrics, Book syndicate private limited
4. GS Maddala, Introduction of econometrics, Wiley
5. Gupta, S. C., & Kapoor, V. K. (2000). Fundamentals of mathematical statistics . Sultan Chand & Sons, 10th Revised Edition.
6. Studenmund, A. H. (2014). Using Econometrics: A Practical Guide. (7th ed.). New Delhi: Pearson.
7. Wooldridge, J. M. (2018). Introductory econometrics: A modern approach , (7th Ed), CENGAGE.

SEMESTER VII

Paper Title: INDIAN ECONOMY II

Paper Code- ECOMAJ4024

Credit Points- 4

Course Objective: Students will gain a comprehensive understanding of the economic structure, functioning, and policies of India. It involves analyzing various aspects such as macroeconomic indicators, sectors of the economy, policy frameworks, and socio-economic factors that shape India's economic development.

Course outcome: It will equip students with a strong understanding of the economic dynamics of India, enabling them to contribute effectively to policy-making, research, business decisions, and socio-economic development in the country

Course Description

This course examines sector-specific policies and their impact in shaping trends in key economic indicators in India. It highlights major policy debates and evaluates the Indian empirical evidence. Given the rapid changes taking place in the country, the reading list will have to be updated annually

Unit-1: Macroeconomic Policies and Their Impact

Fiscal Policy; Trade and investment policy; Financial and monetary policies; Inflation and measures to control inflation; Labour laws and regulation (10 Lectures)

Unit-2: Policies and Performance in Agriculture

Growth; productivity; agrarian structure and technology; capital formation; Agricultural marketing; Food security and food policy; Pricing and procurement; WTO and Indian agriculture (10 Lectures)

Unit-3: Policies and Performance in Industry

Output, employment and productivity growth; Small scale industries- problems and prospects and its contribution in national economy; Public sector; competition policy; Foreign direct investment in industry; Economic reform and industry; Industrial stagnation and crisis of the Indian economy. (20 Lectures)

Unit-4: Trends and Performance in Services

Formal and informal sectors; Banking and insurance; Trade in services (10 Lectures)

Recommended readings:

1. Shankar Acharya, 2010, —Macroeconomic Performance and Policies 2000-8 Development and Participation, Oxford University Press.
 2. Rakesh Mohan, 2010, —India 's Financial Sector and Monetary Policy Reforms, Development and Participation, Oxford University Press.
 3. Pulapre Balakrishnan, Ramesh Golait and Pankaj Kumar, 2008, —Agricultural Growth in India Since 1991, RBI DEAP Study no. 27.
 4. B.N. Goldar and S.C. Aggarwal, 2005, —Trade Liberalisation and Price-Cost Margin in Indian Industries, The Developing Economics, September.
- Uma Kapila: Indian Economy since independence, Academic Foundation

SEMESTER VII
Course: MONEY AND FINANCIAL MARKET

Paper Code- ECOMAJ4034

Credit Points: 4

Course Description: This course provides an in-depth analysis of the workings of financial markets and the role of money in the modern economy. The course will cover topics such as financial instruments, financial intermediaries, monetary policy, and the impact of financial markets on economic growth and stability.

Course Objectives: To provide students with an understanding of the workings of money and financial markets, including the different types of financial instruments traded in these markets. To introduce students to the role of financial intermediaries in the modern economy, and how they facilitate the flow of funds between savers and borrowers. To explore the concept of monetary policy and how it is used by central banks to influence economic activity. To examine the impact of financial markets on economic growth and stability, and the challenges posed by financial market volatility and crises

Learning Outcomes:

Understand financial markets and the role of money in the modern economy. Identify and explain different financial instruments traded in financial markets. Analyse the role of financial intermediaries in the modern economy. Evaluate the impact of monetary policy on the economy. Assess the impact of financial market volatility and crises on economic growth and stability.

Course Units and Credits:

Unit 1: Introduction to Money and Financial Markets (1 Credit)

Definition and functions of money markets and financial markets; Types of money markets- Treasury Bill, Commercial paper, Certificate of deposit, and repurchase agreements.; Types of financial markets- money, bonds, stocks, derivatives and foreign exchange.

Unit 2: Financial Instruments and Risk Management (1 Credit)

Types of financial instruments: bonds, stocks, and derivatives; Valuation of financial instruments: present value and future value; Risk management: diversification, hedging, and insurance.

Unit 3: Financial Intermediation and the Banking System (1 Credit)

The role of financial intermediaries: banks, insurance companies, and investment firms; The banking system: structure and functions; Financial regulation and supervision.

Unit 4: Monetary Policy and Central Banking (1 Credit)

The central banking system: structure and functions; Monetary policy tools: reserve requirements, discount rate, and open market operations; The impact of monetary policy on financial markets and the economy.

Recommended Readings:

Agricultural Economics and Rural Sociology: The Contemporary Core Literature by David L. Debertin and Gerald A. Carlson.

Agricultural Production Economics by David L. Debertin.

Mishkin, F. (2016). The Economics of Money, Banking, and Financial Markets (11th Edition). Pearson.

Principles of Agricultural Economics by Andrew Barkley.

The Economics of Agriculture by Ivan K. Cohen and Richard E. Caves

SEMESTER VII

Course Title: ENVIRONMENTAL ECONOMICS-I

Paper code: ECOMAJ 4044

CREDIT 4

Objectives: The objective of studying environmental economics is to understand the economic aspects of environmental issues and the interplay between the environment and the economy. It involves analyzing the economic implications of resource use, pollution, climate change, and other environmental challenges, as well as exploring policy options to promote sustainable development and environmental conservation.

Course outcome: It will equip students with the knowledge and tools to analyze and address environmental challenges from an economic standpoint. It prepares them to contribute to policy formulation, environmental management, sustainable business practices, and advocacy for a more environmentally sustainable future.

UNIT 1: INTRODUCTION

Definition and scope of Environmental Economics, Economy-environment interaction, Review of microeconomics and welfare economics

UNIT 2: MARKET FAILURE

Definition of market failure, Pareto optimality, Externality, Public good, Tragedy of Commons

UNIT 3: ENVIRONMENTAL POLICY

Environmental Kuznet's curve, Pollution control policies: Command and Control approach, Incentive based approach

UNIT 4: GLOBAL ENVIRONMENTAL ISSUES

Climate change, Ozone depletion, Biodiversity loss; Trade and Environment

Recommended Readings:

1. Hanley, Shrogram and White, *Introduction to Environmental Economics*, OUP
2. Rabindra N. Bhattacharya, *Environmental Economics*, OUP
3. Charles D. Kolstad, *Environmental Economics*, OUP
4. UlaganathanSankar, *Environmental Economics*, OUP

SEMESTER VII

Course title: RESEARCH METHODOLOGY

Course code: ECOREM 4044

Credit 4

Course Objective:

Learning research methodology aims to provide individuals with the knowledge and skills necessary to design, conduct, analyze, and evaluate research studies effectively. Research methodology is a systematic approach to investigating, acquiring, organizing, and interpreting knowledge through scientific methods.

Learning Objective:

Overall, learning research methodology equips individuals with the necessary tools and skills to engage in systematic inquiry and contribute to the advancement of knowledge in their respective fields. It prepares students to conduct research, pursue graduate studies, and engage in evidence-based decision-making in academic, professional, and organizational settings.

Course Outline

1. Introduction to Research Methodology
 - Definition and significance of research
 - Characteristics of scientific research
 - Steps in the research process
 - Ethical considerations in research
2. Research Design
 - Types of research designs: experimental, quasi-experimental, correlational, descriptive, etc.
 - Selection of appropriate research design based on research questions or hypotheses
 - Validity and reliability in research design
 - Sampling techniques and considerations
3. Data Collection Methods
 - Quantitative data collection methods: surveys, questionnaires, experiments, primary and secondary data
 - Qualitative data collection methods: interviews, focus groups, observations
 - Data collection instruments and their development
 - Ethical considerations in data collection
4. Report writing
 - Outline of the Research report;
 - Integration of the hard data into the report
 - Drawing inferences and conclusion
 - Referencing system.

Recommended Readings:

1. Ranjit Kumar (2014) *Research Methodology: A Step by Step Guide for the Beginners*, 4th edition, Sage Publication
2. C R Kothari & Gaurav Garg (2019) *Research Methodology: Methods and Techniques*, 4th edition, New Age International Publishers.

SEMESTER VII

Course Title: PUBLIC FINANCE

Course code ECOMIN4014

credit:4

Course Objective: studying public finance is to develop a comprehensive understanding of the government's role in managing public funds, allocating resources, and making fiscal policy decisions. It involves analyzing various aspects of public finance, such as taxation, government expenditures, public debt, budgeting, and the impact of fiscal policies on the economy and society.

Course outcome: Overall, studying public finance equips students with a deep understanding of the principles, policies, and practices related to government finance. It enables them to analyze fiscal issues, contribute to policy debates, and make informed decisions regarding public finance management at various levels of government.

Course Outline:

Unit1 Public Economic Theory

Public finance: definition, nature and scope, private and public finance, role of public finance; Fiscal policy: meaning, objectives, instruments; Public goods: definition, types, models of efficient allocation, free riding, Externalities: the problem and its solutions, taxes versus regulation; Taxation: meaning, types, economic effects, a good tax system, efficiency and equity considerations, tax incidence;

Unit 2 Public expenditure

Public expenditure: meaning, causes of growth of public expenditure. Public debt: meaning, reasons for growing public debt. Theories of Public Expenditure- Lindhal's Model of Voluntary Exchange, Musgrave's Optimum Budget Theory

Unit-3 Public Debt

The Neo-classical Theory of Incidence and Shifting, Musgrave's Budget Incidence Theory
Public Debt- sources, burden and effects, Optimality in Public Debt Management Pay- As- You- Use and Pay- As- You-go Finance, Musgrave's Intergeneration Equity Theory.

Unit 4 Indian Public Finance

Tax system in India: structure and reforms; Budget deficits and public debt; Fiscal federalism in India.

Recommended Readings:

1. J. Hindrinks, G. Myles: *Intermediate Public Economics*, MIT Press, 2006.
2. H. Rosen, T. Gayer: *Public Finance*, 9th ed., McGraw-Hill/Irwin, 2009.
3. Joseph E. Stiglitz, *Economics of the Public Sector*, W.W. Norton & Company, 3rd edition, 2000.
4. R.A. Musgrave and P.B. Musgrave, *Public Finance in Theory & Practice*, McGraw Hill Publications, 5th edition, 1989.
5. John Cullis and Philip Jones, *Public Finance and Public Choice*, Oxford University Press, 1st edition, 1998.
6. Harvey Rosen, *Public Finance*, McGraw Hill Publications, 7th edition, 2005.
7. Mahesh Purohit, *Value Added Tax: Experiences of India and Other Countries*, 2007.
8. R.K Choudhury, *Public Finance and Fiscal Policy*, Kalyani Publishers, 2000.

SEMESTER - VIII

Course Title: HISTORY OF ECONOMIC THOUGHT

Paper Code: ECOMAJ 4054

Credit Points: 4

Course Objectives: The objective of this course is to acquaint the learners with the historical developments in the economic thoughts propounded by different schools. The objective of this course is to acquaint the learners with the historical developments in the economic thoughts propounded by different schools.

Learning Outcome: The course trains the students of Economics about the basics of Pre-Classical and Classical Economic Thought, the philosophy of the different school of thoughts along with the note's Indian thinkers in relation to economics. This course aims to give students a transparent idea regarding the different school of thoughts at the intermediate-level to understand the evolution of basic economic.

Unit – 1: Pre-Classical and Classical Economic Thought

Basic tenets of Mercantilism and Physiocracy: Contributions of Adam Smith, David Ricardo, T.R. Malthus, J.B. Say, J.S. Mill's Restatement of Classicism.

Unit – 2: Some Famous School of Thought

- (i) Marginalist school: William Stanley Jevons, J.B. Clerk,
- (ii) Austrian school: Karl Menger: Goods, Value, Eugen Von Bohm-Bawerk: Theory of Interest; Value and Price.
- (iii) Mathematical School: L.Walras, W. Leontief, Hicks,
- (iv) Neo-Classical Economics: Alfred Marshal, Wickshell; J.M. Keynes, Keynes' Departure from Classical Economics, Salient Features of the General Theory of Employment, Interest and Money, Theory of Employment, Theory of Prices, Keynesian Economics and Underdeveloped Countries; Keynesianism Vs. Monetarism.
- (v) Welfare Economics: A.C. Pigou

Unit – 3: Socialist Thoughts

Contributions of Karl Marx: Theory of Value, Theory of Surplus, Theory of Economic Development.

Unit – 4: Indian Economic Thought

Development of Indian Economic Thought; Economic ideas of Kautilya, D. Naoroji: National Income, The Drain Theory, Gopal Krishan Gokhale, M. K.Gandhi: Village, Swadeshi, Khadi, Cottage Industries, Welfare of Labour, Decentralisation, Trusteeship, Sarvodaya.

Recommended Readings:

1. Bhatia.H.L.(2014): History of Economic Thought.
1. Roy,Tirthankar,(2020) The Economic History of India, 1857–2010, ,OUP, India
4. Lokanathan, V. (2018) A History of Economic Thought, S Chand publication
5. Paul, Rr, (2018) History of Economic Thought, K Publisher
6. Hajela, T.N, (2015) History of Economic Thought,18th Edition, Ane Books
7. Hunt,E.K.&Lautzenheuser, Mark (2011)History of Economic Thought, 3rd Edition,Taylor& Francis
8. Haney, L.H. (2009) History of Economic Thought, University of Michigan

10. Dasgupta, A. K., (1993) A History of Indian Economic Thought, Routledge
12. Schumpeter, J.A(1952) Ten Great Economists, Routledge
14. Roll, E (1938) A History of Economic Thought, Faber, London, Faber & Faber
15. Gide, C. and G. Rist (1915) A History of Economic Doctrines, Boston.

SEMESTER - VIII

DISSERTATION/RESEARCH PROJECT

Course Code ECOMAJ40112

credit: 12

Or

Advance Level Course (in lieu of dissertation)

Course Title: ADVANCED ECONOMETRICS

Course Code: ECOADL4014

Credit:4

Objective: This course is further extension of introductory econometrics. The objective is to further their understanding and knowledge of different estimations techniques and problems of estimation associated with it.

Outcome: The learners would be able to equip themselves with further understanding of concepts and also learn about the problems associated with econometric estimations.

1. Specification bias and functional forms of regression

Inclusion of irrelevant variables, exclusion of important variables, incorrect functional forms of regression, log-linear models, semi-log models, reciprocal transformation or hyperbolic models

2. Dummy variables

Nature, uses of dummy variables (intercept, slope & both), ANOVA and ANCOVA models, caution in the use of dummy variables : dummy variable trap

3. Multicollinearity

Multicollinearity, Nature of multicollinearity, estimation in presence of multicollinearity (consequences), detection and remedial measures. Heteroscedasticity and Autocorrelation (concept only)

Unit 4: Introduction to simultaneous Equation models

Structural and reduced forms- Simultaneity bias- informal introduction to identification problem
Formalization of identification problem- order and rank condition of identification.

Recommended readings:

1. GMK Madnani, Introduction to econometrics, Oxford & IBH publishing
2. D Gujarati, Basic Econometrics, McGraw Hill series
3. Jaydeb Sarkhel, Basic Econometrics, Book syndicate private limited
4. GS Maddala, Introduction of econometrics, Wiley
5. Gupta, S. C., & Kapoor, V. K. (2000). Fundamentals of mathematical statistics . Sultan Chand & Sons, 10th Revised Edition.
6. Studenmund, A. H. (2014). Using Econometrics: A Practical Guide. (7th ed.). New Delhi: Pearson.
7. Wooldridge, J. M. (2018). Introductory econometrics: A modern approach , (7th Ed), CENGAGE.

SEMESTER VIII

Course Title: AGRICULTURAL ECONOMICS

Course Code: ECOADL4024

Credit:4

Course Objective: The objective of this course is to provide undergraduate students with an understanding of the economic principles that underlie agricultural production, marketing, and policy. The course will focus on the application of economic concepts to the study of agriculture, food production, and rural development.

Learning Outcomes:

Course Outline: Overall, studying agricultural economics equips students with a solid understanding of the economic principles and policies related to agriculture. It prepares them for careers in agricultural and rural development, policy analysis, agribusiness management, agricultural finance, research, and consultancy, allowing them to contribute to the sustainable and efficient development of the agricultural sector and rural communities

Course Outline:

Unit 1: Introduction to Agricultural Economics (1 credit point)

Definition, scope, and importance of Agricultural Economics; Basic economic concepts and principles; Role of agriculture in economic development.

Unit 2: Agricultural Production (1 credit point)

Factors of production in agriculture; Production functions and their application in agriculture; Farm management and decision-making.

Unit 3: Agricultural Marketing and Trade (1 credit point)

Agricultural market structures; Marketing channels and strategies; International trade in agriculture.

Unit 4: Agricultural Policy (1 credit point)

Agricultural policy goals and instruments; Market failures and government intervention in agriculture; Agricultural policy in India.

Recommended readings:

T. N. Hajra and Abhijit Bhattacharyya, Agricultural Economics: A Basic Text, New Age International Publishers, 2017.

R. K. Laxman and A. M. Narayan, Agricultural Economics, Himalaya Publishing House, 2019.

R. K. Singh and R. K. Srivastava, Agricultural Economics: Principles and Practices, S. Chand & Company, 2018.

Ministry of Agriculture and Farmers Welfare, Government of India. (2021). Agricultural Statistics at a Glance 2020

SEMESTER VIII

Course Title: ENVIRONMENTAL ECONOMICS- II

Course code: ECOADL4034

CREDIT 4

Objectives: The objective of studying environmental economics is to understand the economic aspects of environmental issues and the interplay between the environment and the economy. It involves analyzing the economic implications of resource use, pollution, climate change, and other environmental challenges, as well as exploring policy options to promote sustainable development and environmental conservation.

Course outcome: It will equip students with the knowledge and tools to analyze and address environmental challenges from an economic standpoint. It prepares them to contribute to policy formulation, environmental management, sustainable business practices, and advocacy for a more environmentally sustainable future

UNIT 1: NATURAL RESOURCES

Types and characteristics

UNIT 2: ECONOMICS OF RENEWABLE AND NON-RENEWABLE RESOURCES

Non-Renewable Resources: conditions for optimal depletion, Market forms and rate of depletion, Role of backstop; Renewable Resources: The idea of sustainable yield, economically optimal rate of harvest

UNIT 3: SUSTAINABLE DEVELOPMENT

Sustainable development: Definition, objectives, rules, indicators; Integrated Economic and Environmental Accounting

UNIT 4: ENVIRONMENTAL VALUATION

Meaning, importance, measurement: direct method- Contingent Valuation Method and indirect method- Hedonic Pricing Method

Recommended readings:

1. Hanley, Shrograph and White, *Introduction to Environmental Economics*, OUP
2. Rabindra N. Bhattacharya, *Environmental Economics*, OUP
3. Charles D. Kolstad, *Environmental Economics*, OUP
4. UlaganathanSankar, *Environmental Economics*, OUP

SEMESTER VIII

Paper Title: THE ECONOMY OF NORTH-EAST INDIA

Course: Minor Paper Code: ECOMIN4014 Credit: 4

Course Objectives: The objective of studying Northeast India is to gain a comprehensive understanding of the region's geographical, cultural, historical, and socio-economic aspects. It involves exploring the unique characteristics, challenges, and opportunities of the eight states that comprise Northeast India

Course Outcome: Overall, studying Northeast India equips students with a deep understanding of the region's geographical, cultural, historical, and socio-economic aspects. It enables them to contribute to policy formulation, research, development planning, and initiatives that promote inclusive and sustainable development in the region. Students will also gain cross-cultural awareness and appreciation, fostering a greater understanding of the diverse cultural tapestry of India.

Course Outline:

Unit- 1. Major features of the economy of North East India:

Basic features, Natural Resources – Mineral, Forest and Water resources, Broad Demographic features ---Population size, growth rates, Population density, Migration of population, Urbanisation, Occupational distribution; Regional variations in Health and Educational attainments, (literacy Rate, birth rate, death rate, sex- composition, Infant Mortality Rate, Maternal Mortality Rate); Poverty and Employment.

Unit-2. Agriculture:

Trends and Pattern of Production – Land- use pattern and Cropping pattern, Agricultural production and productivity, Modernisation process of agriculture, Shifting Cultivation, prospects of Allied Agriculture, Sustainable agriculture and its importance in North Eastern Region.

Unit – 3. Industry:

Achievements and failures of industrial sector; Problems and prospects of Industrial development of North Eastern region, Organised Industries - Role of Tea, Oil and Coal industries; Micro, small and medium industries, Problem and Prospects of small scale and cottage industries, prospects of border trade with neighbouring countries, Tourism industry, Industrial Policy of North –East India (1997 and 2007).

Unit – 4. Infrastructure:

Economic Infrastructure of the region – Roadways, Railways, Waterways, Airways; Communication; Social Infrastructures- Education and Health in North Eastern Region.

Unit – 5. Developmental issues of the Region:

North –East India as a Challenge to National Development Effort: Importance, Challenge, Barriers and recent policy initiatives; Border Area Development; North Eastern Council (NEC) –

objectives and functions and performances; Act East policy – objectives and prospects and its relation with Asian Countries.

Recommended reading:

1. Ray Asok Kumar (2007), *Revisiting North East India in the Era of Globalisation*, OM Publication, New Delhi.
2. Dutta Roy. B., *Social and Economic Profile of N.E. India*, Omsons, New Delhi
3. Bordoloi and Neog, *Economy of the North East*, LSB Publication.
4. NEC: (a) Basic Statistics of N.E. Region, 1980-85
(b) Towards Regional Development: Plans and Perspective
5. P. Nayak, *Growth and Human Development in Northeast India*, OUP
6. North Eastern Region Vision 2020, NEC, Ministry of Development of North Eastern Region
7. NEDFi, Databank
8. NEC data bank
9. Dhar. P.K. (2016), *The Economy of Assam Including Economy of North-East India*, Kalyani Publisher.
