

SYLLABUS
GOLAGHAT COMMERCE COLLEGE
(AUTONOMOUS)
FYUGP 2020



DEPARTMENT OF ECONOMICS

(Recommended by B.O.S. in Economics in its meetings held on 27/11/2024 and approved by Academic Council in its meeting held on 30/11/2024 and effective from the session, 2024-25)

INTRODUCTION

The Under Graduate (UG) syllabus of Economics as recommended by the University Grants Commission (UGC) and the New Education Policy (NEP), 2020 consists of Major (Core) disciplines, Minor disciplines, Multi-Disciplinary Generic Elective Courses (MDGEC), Ability Enhancement Courses (AEC), Value Added Courses (VAC), Skill Enhancement Courses (SEC), Environmental Education (EE), Community Based Engagement (NCC/NSS/Adult Education/Student Mentoring/NGO/Govt. institutions, etc.), Digital Fluency (DF), Research Ethics and Methodology, Research Project (Development of Project/Research Proposal, Review of related literature), Dissertation (Collection of Data, Analysis and Preparation of Report) and Discipline Specific Electives (DSE).

PROGRAMME SPECIFIC OUTCOME

The objective of the UG Program in Economics is to help students become more analytical, logical, and critical thinkers so they can use economic reasoning in real-world situations. A bachelor's degree in economics exposes students to a broad range of intriguing theoretical and applied topics that will help them prepare for a variety of economics-related careers in government, business, industry, commerce, finance, and research. The curriculum covers a broad range of economics-related theoretical and applied issues. It seeks to foster in the pupils an analytical perspective on human economic behaviour. The goal is to install in them the perspective of an ethically conscious and socially conscious citizen.

**DRAFT STRUCTURE OF FOUR YEAR UNDER GRADUATE PROGRAMMES (FYUGP) IN GOLAGHAT COMMERCE COLLEGE
(AUTONOMOUS) AS PER UGC DRAFT RELEASED on 12/12/2022**

Year	Semester	Course (Lecture+Tutorial+Practical)	No. of Courses	Course Code	Name of the Course	Credit	Remarks
1st	1st	Major (Core)	1	ECOMAJ1	Introductory Microeconomics	4	-
		Minor	1	ECOMIN1	Elementary Microeconomics	4	The course shall be taken by students from discipline other than Economics
		Multi- Disciplinary Generic Elective Course: Natural Science- II/ Social Science/ Humanities–II/ Commerce-II	1	ECOGEC1	Basics of Microeconomics	3	The course shall be taken by students from discipline other than Economics
		AEC Language	1			4	Students shall have to take one of the language disciplines offered by the college
		Value Added Course- Understanding India/ Health and	1	VAC1/ VAC2		2	Students shall have to take any one of the courses offered by the college
		Skill Enhancement Course	1			3	Students shall have to take the course offered by the college
		Total				20	

Year	Semester	Course (Lecture+Tutorial+Practical)	No. of Courses	Course Code	Name of the Course	Credit	Remarks
1	2 nd	Major (Core)	1	ECOMAJ2	Introductory Macroeconomics	4	-
		Minor	1	ECOMIN2	Elementary Macroeconomics	4	The course shall be taken by students from disciplines other than Economics
		Multi- Disciplinary Generic Elective Course: Natural Science –II /Social Science/Humanities–II/Commerce-II	1	ECOGEC2	Basics of Macroeconomics	3	The course shall be taken by students from disciplines other than Economics
		AEC: Language and Communication Skills(English)-II	1			4	
		Value Added Course- Environmental Education with emphasis on community-based activities/ Yoga	1	VAC 3/ VAC4		2	Students shall have to take any one of the courses offered by college
		Skill Enhancement Course	1			3	Students shall have to take the course offered by college
		Total				20	
Grand Total (Semester I and II)						40	
Students on exit shall be awarded Undergraduate Certificate (in the Field of Study/Discipline) after securing the requisite 40 Credits in Semesters I and II							

Year	Semester	Course (Lecture+Tutorial+Practical)	No. of Courses	Course Code	Name of the Course	Credit	Remarks
2	3 rd	Major	2	ECOMAJ3	Mathematical Methods for Economics I	4	-
				ECOMAJ4	Issues of Indian Economy	4	-
		Minor	1	ECOMIN3	Basics of Indian Economy	4	The course shall be taken by students from disciplines other than Economics
		Multi- Disciplinary Generic Elective Course: Natural Science/Social Science/Humanities -III/Commerce-III	1	ECOGEC3	Economy of India and Assam	3	The course shall be taken by students from disciplines other than Economics
		Value Added Course-Digital and Technological Solutions/Digital Fluency	1	VAC 5/ VAC 6		2	Students shall have to take the course offered by college
		Skill Enhancement Course	1			3	Students shall have to take the course offered by college
		Total				20	
Year	Semester	Course (Lecture+Tutorial+Practical)	No. of Courses	Course Code	Name of the Course	Credit	Remarks
2	4 th	Major	4	ECOMAJ5	Advanced Microeconomics	4	-
				ECOMAJ6	Development Economics	4	
				ECOMAJ7	Mathematical Methods for Economics II	4	
				ECOMAJ8	Public Finance	4	
		Minor	1	ECOMIN4	Fundamental Mathematics for Economics	4	The course shall be taken by students from disciplines other than Economics
		Total				20	
Grand total (Semester I, II, III and IV)						80	
Students on exit shall be awarded Undergraduate Diploma (in the Field of Study/Discipline) after securing the requisite 80 Credits in Semesters I, II, III and IV							

Year	Semester	Course (Lecture+Tutorial+Practical)	No. of Courses	Course Code	Name of the Course	Credit	Remark s
3	5th	Major	4	ECOMAJ9	Statistical Methods for Economics	4	
				ECOMAJ10	International Economics	4	
				ECOMAJ11	Monetary Economics and Financial Market	4	
				ECOMAJ12	Internship/ Project		
		Minor		ECOMIN5	Development Economics	4	The course shall be taken by students from disciplines other than Economics
		Total				20	
Year	Semester	Course (Lecture+Tutorial+Practical)	No. of Courses	Course Code	Name of the Course	Credit	Remark s
3	6th	Major		ECOMAJ13	Environmental Economics	4	
				ECOMAJ14	History of Economic Thought	4	
				ECOMAJ15	Economy of Assam	4	
				ECOMAJ16	Basic Econometrics	4	
		Minor		ECO/MIN6	Public Finance	4	The course shall be taken by students from disciplines otherthan Economics
				Total			
	Grand Total (Semester I, II, III, IV, V and VI)					120	
Students on exit shall be awarded Undergraduate Degree (in the Field of Study/Discipline) after securing the requisite 120 Credits in Semesters I, II, III, IV, V and VI							

FYUGP (NEP) 1ST SEMESTER SYLLABUS

Course Title	:	Introductory Microeconomics
Course Code	:	ECOMAJ1
Nature of Course	:	Major
Total Credits	:	4 credits
Distribution of Marks	:	60 (End-Sem.) + 40 (In-Sem.)

Course Objectives:

1. To expose students to the basic principles of microeconomic theory
2. To enlighten the learners about the fundamental economic trade-offs and allocation problems due to scarcity of resources

Learning Outcomes: On completion of this course, a student will be able to-

1. Understand the economic trade-offs and opportunities
2. Understand the fundamentals of Microeconomics
3. Understand the behaviour of consumer and producer and attainment of consumer's and producer's equilibrium
4. To apply the principles of microeconomics in relation to production function, costs and revenues
5. Understand and demonstrate the basics of market mechanism and the equilibrium condition of different form of market

UNITS	COURSE CONTENTS	L	T	P	Total Hours
I	Exploring the subject matter of Economics: Why study economics? Scope and method of economics; Scarcity and choice; Types of Microeconomic Analysis, Goals of Microeconomics-Growth and Efficiency; The economic problems: the question of what to produce, how to produce and how to distribute output; Economic models: Verification and general features of economic models; Applications of microeconomics.	8	2	-	10
II	Consumer and Producer Behaviour: Utility: Cardinal and Ordinal Approach, Indifference Curve-Properties of Indifference curve, Budget Constraints, Consumer's Equilibrium; Price effect, Substitution and Income effect of a price change- for Normal, Inferior and Giffen goods; derivation of the demand curve using Indifference curve approach. Production Function, production function with one variable input and with two variable inputs; choice of technology (labour intensive, intermediate and Capital-intensive techniques), isoquant and iso-cost lines, cost minimizing equilibrium condition.	10	4	-	14

III	Supply and Demand: Concept of Demand/Supply, determinants of individual demand/supply; demand/supply schedule and demand/supply curve; market versus individual demand/supply; shifts in the demand/supply curve, demand and supply together; how prices allocate resources; elasticity and its application; controls on prices; taxes and the costs of taxation; consumer surplus; producer surplus and the efficiency of the markets.	9	3	-	12
IV	Concept of Cost and Revenue: Theory of Cost: Traditional theory of cost- short-run cost curves and their interrelationships, Long-run costs: the Envelope Curve, Modern theory of Cost, Economies and diseconomies of scale. Theory of Revenue: Total, Average and Marginal Revenue, relation between average and marginal revenue.	9	3	-	12
V	Firm and Market Structure: Theory of Firm: equilibrium condition of firm. Concept of market; Perfect competition, assumption, equilibrium of a firm and industry under perfect competition in the short-run and long-run. Imperfect Market Structure: price and output determination under monopoly and monopolistic competition, the concept of oligopoly.	9	3	-	12
TOTAL		45	15	-	60

L: Lectures

T: Tutorials

P: Practical

MODES OF IN-SEMESTER ASSESSMENT: 40 Marks

- Two Internal Examinations - **20 Marks**
- Attendance - **05 Marks**
- Others (Any three) - **15 Marks**
 - Home assignment
 - Class test/ Unit test
 - Field work
 - Viva voce
 - Seminar
 - Group discussion
 - Quiz

Suggested Readings:

- Karl E. Case and Ray C. Fair, Principles of Economics, Pearson Education Inc., 8th Edition, 2007.
- N. Gregory Mankiw, Economics: Principles and Applications, India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition, 2007.
- Joseph E. Stiglitz and Carl E. Walsh, Economics, W.W. Norton & Company, Inc., New York, International Student Edition, 4th Edition, 2007.
- G.S. Maddala and Ellen Miller, Microeconomics: Theory and Applications, McGraw Hill Education, Tenth Reprint, 2013, New Delhi Edition
- R.S. Pindyck, D.N. Rubinfeld and P.L. Meheta (2009): Microeconomics, 7th Edition, Pearson, New Delhi
- McConnell, Brue and Flynn, Microeconomics: Principles, Problems, and Policies, McGraw Hill Education (India) Private Limited, 2017
- Bharali Ranjukumar, Dutta Sanjib, Byastigata Arthanitir Porichoy
- Bora Arindam, Byastigata Arthabigyan

FYUGP (NEP) 1ST SEMESTER SYLLABUS

Course Title	:	Elementary Microeconomics
Course Code	:	ECOMIN1
Nature of Course	:	Minor
Total Credits	:	4 credits
Distribution of Marks	:	60 (End-Sem.) + 40 (In-Sem.)

Course Objectives:

1. To expose students to the basic principles of microeconomic theory
2. To enlighten the learners about the fundamental economic trade-offs and allocation problems due to scarcity of resources

Learning Outcomes: on completion of this course, a student will be able to-

1. Understand the economic trade-offs and opportunities
2. Understand the fundamentals of Microeconomics
3. Understand the behaviour of consumer and producer and attainment of consumer's equilibrium
4. To apply the principles of microeconomics in relation to production function, costs and revenues
5. Understand and demonstrate the basics of market mechanism and the equilibrium condition of different form of market

UNITS	COURSE CONTENTS	L	T	P	Total Hours
I	Introduction What is Microeconomics; Problem of scarcity and choice; opportunity cost, production possibility frontier; economic systems. Demand and supply: law of demand, determinants of demand, market demand, law of supply, determinants of supply, market supply, shifts in demand and supply curves, market equilibrium; Elasticity of demand and supply; types of elasticity (price, income and cross) ; percentage method of calculating elasticity.	9	3	-	12
II	Consumer Theory Utility: Cardinal and Ordinal Approach, Indifference Curve- Properties of Indifference curve, Budget Constraints, Consumer's Equilibrium; Price effect, Substitution and Income effect of a price change- for Normal, Inferior and Giffen goods; derivation of the demand curve using Indifference curve approach.	9	3	-	12

III	Cost and Revenue Analysis Concept of cost, types of cost, relationship between Average Cost and Marginal Cost, Short run and long run cost curves. Theory of Revenue: Total, Average and Marginal Revenue, relation between average revenue and marginal revenue	9	3	-	12
IV	Producer's Behaviour Concept of Production; production functions, Law of Variable Proportion, Return to Scale, isoquant and iso-cost lines, cost minimizing equilibrium conditions	9	3	-	12
V	Theory of firm: price and output determination Theory of Firm: equilibrium condition of firm, concepts of market, (perfect competition, monopoly, monopolistic, oligopoly); price and output determination under perfect competition: short run and long run.	9	3	-	12
TOTAL		45	15	-	60

L: Lectures

T: Tutorials

P: Practical

MODES OF IN-SEMESTER ASSESSMENT: 40 Marks

- Two Internal Examinations - **20 Marks**
- Attendance - **05 Marks**
- Others (Any three) - **15 Marks**
 - Home assignment
 - Class test/ Unit test
 - Field work
 - Viva voce
 - Seminar
 - Group discussion
 - Quiz

Suggested Readings:

- Karl E. Case and Ray C. Fair, Principles of Economics, Pearson Education Inc., 8th Edition, 2007.
- N. Gregory Mankiw, Economics: Principles and Applications, India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition, 2007.
- Joseph E. Stiglitz and Carl E. Walsh, Economics, W.W. Norton & Company, Inc., New York, International Student Edition, 4th Edition, 2007.
- G.S. Maddala and Ellen Miller, Microeconomics: Theory and Applications, McGraw Hill Education, Tenth Reprint, 2013, New Delhi Edition
- McConnell, Brue and Flynn, Microeconomics: Principles, Problems, and Policies, McGraw Hill Education (India) Private Limited, 2017
- Bharali Ranjukumar, Dutta Sanjib, Byastigata Arthanitir Porichoy
- Bora Arindam, Byastigata Arthabigyan
- Gogoi Baruah Minoti, Neog Brojen Ch, Bora Arindam, Mahanta Hazarika Bidisha, Hira Bisitra, Byastigata Arthabigyan Tatta Porisoy

FYUGP (NEP) 1ST SEMESTER SYLLABUS

Course Title	:	Basics of Microeconomics
Course Code	:	ECOGEC1
Nature of Course	:	Generic Elective
Total Credits	:	3 credits
Distribution of Marks	:	45 (End-Sem.) + 30 (In-Sem.)

Course Objectives:

1. To expose students to the basic principles of microeconomic theory
2. To enlighten the learners about the fundamental economic trade-offs and allocation problems due to scarcity of resources

Learning Outcomes: on completion of this course, a student will be able to-

1. Understand the economic trade-offs and opportunities
2. Understand the fundamentals of Microeconomics
3. Understand the behaviour of consumer and producer and attainment of consumer's equilibrium
4. To apply the principles of microeconomics in relation to production function, costs and revenues

UNITS	Course contents	L	T	P	Total Hours
I	Introduction Approaches to Economics; Microeconomics and Macroeconomics, Definition, subject matter and Scope of Microeconomics,	9	1		10
II	Demand and Supply Concept of demand and supply, laws of Demand and Supply: Individual and Market Demand and Supply: Market Equilibrium and the impact of changes in demand and supply: price elasticity of demand and supply and their types	9	1		10
III	Consumer Behavior and Producer Behavior Theory of Consumer Behavior: Utility Analysis- Cardinal utility theory, Indifference Curves Theory: Assumptions and Properties of Indifference curves; Budget Constraints and Equilibrium of the Consumer. Theory of Production: Production function and its types, law of variable proportion, iso quant, laws of return to scale.	13	2		15

IV	Theory of Cost and Revenue Concepts of cost, types of cost, relationship between Average Cost and Marginal cost Concept of revenue; Total, Average and Marginal Revenue, relation between average and marginal revenue.	10			10
TOTAL		45	-	-	45

L: Lectures

T: Tutorials

P: Practical

MODES OF IN-SEMESTER ASSESSMENT: 30 Marks

- Two Internal Examinations - **20 Marks**
- Attendance - **05 Marks**
- Others (Any one) - **05 Marks**
 - Home assignment
 - Class test/ Unit test
 - Field work
 - Viva voce
 - Seminar
 - Group discussion
 - Quiz

Suggested Readings:

- Karl E. Case and Ray C. Fair, Principles of Economics, Pearson Education Inc., 8th Edition, 2007.
- N. Gregory Mankiw, Economics: Principles and Applications, India edition by South Western, a part of Cengage Learning, Cengage Learning India Private Limited, 4th edition, 2007.
- Joseph E. Stiglitz and Carl E. Walsh, Economics, W.W. Norton & Company, Inc., New York, International Student Edition, 4th Edition, 2007.
- G.S. Maddala and Ellen Miller, Microeconomics: Theory and Applications, McGraw Hill Education, Tenth Reprint, 2013, New Delhi Edition
- R.S. Pindyck, D.N. Rubinfeld and P.L. Meheta (2009): Microeconomics, 7th Edition, Pearson, New Delhi
- McConnell, Brue and Flynn, Microeconomics: Principles, Problems, and Policies, McGraw Hill Education (India) Private Limited, 2017
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- Gogoi Baruah Minoti, Neog Brojen Ch, Bora Arindam, Mahanta Hazarika Bidisha, Hira Bisitra, Byastigata Arthabigyan Tatta Porisoy

FYUGP (NEP) 2nd SEMESTER SYLLABUS

Course Title	:	Introductory Macroeconomics
Course Code	:	ECOMAJ2
Nature of the Course	:	Major
Total Credits	:	04
Distribution of Marks	:	60 (End Sem) + 40 (In-Sem)

Course Objectives:

1. To help students know the meaning of macroeconomics and how the overall production of economy is computed;
2. To familiarize the students with concepts of aggregate demand and aggregate supply;
3. To introduce the students with the classical and Keynesian theories of employment and output determination;
4. To help students understand the meanings of inflation and other concepts related to inflation.

Learning Outcomes: after successful completion of this course, students will be able to-

1. Understand the fundamental objectives and scope of macroeconomics and to understand the evolution of macroeconomics as a distinct field
2. Define national income and various accounting methods and assess the limitations and significance of GDP as an indicator of economic health and social welfare
3. To analyze the components and determinants of aggregate demand and aggregate supply, and understand how these factors interact to influence overall economic activity
4. To critically evaluate the classical and Keynesian theories of output and employment determination, and apply these concepts to understand historical and contemporary economic fluctuations
5. To understand the concept of inflation, its types, causes and effects and other related concepts of inflation and how these factors influence the economy

UNITS	CONTENTS	L	T	P	Total Hours
I	Introduction Microeconomics vs Macroeconomics; Evolution of Macroeconomics as a separate discipline; Nature and scope of macroeconomics; Objectives of Macroeconomics – short term vs long run, economic growth vs stabilization.	10			10
10	National Income Accounting Measuring the value of economic activity and its importance; Meaning of GDP and GNP; Stocks and flows; Circular flow in an economy; Approaches to measuring GDP – Income method, expenditure method, and value-added method; GDP deflator; Real GDP vs Nominal GDP; GDP and the underground economy; GDP and Social welfare.	12	2		14

III	Aggregate Demand and Aggregate Supply Concept of aggregate demand; Components and determinants of aggregate demand –consumption, government spending, investment spending, and net exports; Consumption function – MPC and APC; Saving – determinants of saving – MPS and APS; Investment – determinants of investment; investment function; Concept of Aggregate supply; determinants of aggregate supply; factors shifting aggregate supply, the concept of multiplier, equilibrium income, changes in equilibrium income.	12	2		14
IV	Determination of output and employment The classical theory; Say’s law of markets; The Great Depression of 1930s – failure of classical school and the Keynesian revolution; the Keynesian theory – equality between output and aggregate demand.	12			12
V	Inflation and Deflation Inflation, meaning, types, causes and effects; demand-pull and cost-push inflation; Hyperinflation, cost of hyperinflation; Inflationary gap. Deflation- meaning, effects, inflation vs deflation; Anti-inflationary measures- monetary policy and fiscal policy.	10			10
	Total	60			

L: Lectures

T: Tutorials

P: Practical

MODES OF IN-SEMESTER ASSESSMENT: 40 Marks

- Two Internal Examinations - **20 Marks**
- Attendance - **05 Marks**
- Others (Any three) - **15 Marks**
 - Home assignment
 - Class test/ Unit test
 - Field work
 - Viva voce
 - Seminar
 - Group discussion
 - Quiz

SUGGESTED READINGS:

- Dornbusch, R., Fischer, S. & Startz, R. (2018). *Macroeconomics* (12thed.). McGraw Hill Education
- Froyen, R.T. (2014). *Macroeconomic Theories and Policies* (10thed.). Pearson Education
- Mankiw, N.G. (2007). *Macroeconomics* (6th ed.). Worth Publishers
- Sikdar, S. (2006). *Principles of Macroeconomics*. Oxford University Press
- Bharali Ranjukumar, Dutta Sanjib, Samastigata Arthanitir Porichoy
- Bora Arindam, Samastigata Arthabigyan Porichai
- Ahmed Dr. Rofique, Rabha Dr. Rima, Adhunik Samastigata Arthabigyan

FYUGP (NEP) 2nd SEMESTER SYLLABUS

Course Title	:	Elementary Macroeconomics
Course Code	:	ECOMIN2
Nature of the Course	:	Minor
Total Credits	:	04
Distribution of Marks	:	60 (End Sem) + 40 (In-Sem)

Course Objectives:

1. To help students know the meaning of macroeconomics and how the overall production of economy is computed;
2. To familiarize the students with concepts of aggregate demand and aggregate supply;
3. To introduce the students with the classical and Keynesian theories of employment and output determination;
4. To help students understand the meanings of inflation and other concepts related to inflation.

Learning Outcomes: after successful completion of this course, students will be able to-

1. Understand the fundamental objectives and scope of macroeconomics and to understand the evolution of macroeconomics as a distinct field
2. Define national income and various accounting methods and assess the limitations and significance of GDP as an indicator of economic health and social welfare
3. To analyze the components and determinants of aggregate demand and aggregate supply, and understand how these factors interact to influence overall economic activity
4. To explain the functions and types of money, determinants of money supply and demand, and the quantity theory of money including the motives for holding money: transaction, precautionary and speculative
5. To understand the concept of inflation, its types, causes and effects and other related concepts of inflation and how these factors influence the economy

UNITS	CONTENTS	L	T	P	Total Hours
I	Introduction Microeconomics vs Macroeconomics; Evolution of Macroeconomics as a separate discipline; Nature and scope of macroeconomics; Objectives of Macroeconomics – short term vs long run, economic growth vs stabilization	9	1		10
II	National Income Accounting Measuring the value of economic activity and its importance; Meaning of GDP and GNP; Stocks and flows; Circular flow in an economy; Approaches to measuring GDP – Income method, Expenditure method, and value-added method; GDP deflator; Real GDP vs Nominal GDP; GDP and the underground economy; GDP and Social welfare.	12			12

III	Aggregate Demand and Aggregate Supply Concept of aggregate demand; Components and determinants of aggregate demand – consumption, government spending, investment spending, and net exports; Consumption function – MPC and APC; Saving – determinants of saving – MPS and APS; Investment – determinants of investment; investment function; Concept of Aggregate supply; determinants of aggregate supply; factors shifting aggregate supply, the concept of multiplier.	13	1		14
IV	Demand for and Supply of Money Definition and functions of money, Quantity Theory of Money- Cash transaction and Cash Balance Approaches. Demand for Money- Classical, Neo-classical and Keynesian Approaches. The Keynesian Liquidity Trap and its implications. Determination of Money supply.	12	2		14
V	Inflation and Deflation Inflation- meaning, types, causes and effects; demand-pull and cost-push inflation; Inflationary gap. Deflation- meaning, effects, inflation vs deflation; Anti-inflationary measures- monetary policy and fiscal policy.	10			10
	Total	54	6		60

L: Lectures

T: Tutorials

P: Practical

MODES OF IN-SEMESTER ASSESSMENT: 40 Marks

- Two Internal Examinations - **20 Marks**
- Attendance - **05 Marks**
- Others (Any three) - **15 Marks**
 - Home assignment
 - Class test/ Unit test
 - Field work
 - Viva voce
 - Seminar
 - Group discussion
 - Quiz

SUGGESTED READINGS:

- Dornbusch, R., Fischer, S. & Startz, R. (2018). *Macroeconomics* (12thed.). McGraw Hill Education
- Froyen, R.T. (2014). *Macroeconomic Theories and Policies* (10thed.). Pearson Education
- Mankiw, N.G. (2007). *Macroeconomics* (6th ed.). Worth Publishers
- Sikdar, S. (2006). *Principles of Macroeconomics*. Oxford University Press
- Bharali Ranjukumar, Dutta Sanjib, Samastigata Arthanitir Porichoy
- Bora Arindam, Samastigata Arthabigyan Porichai
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FYUGP (NEP) 2nd SEMESTER SYLLABUS

Course Title	:	Basics of Macroeconomics
Course Code	:	ECOGEC2
Nature of the Course	:	Generic Elective
Total Credits	:	03
Distribution of Marks	:	45 (End Sem) + 30(In-Sem)

Course Objectives:

1. To help students know the meaning of macroeconomics and how the overall production of economy is computed;
2. To familiarize the students with concepts of aggregate demand and aggregate supply;
3. To introduce the students with the classical and Keynesian theories of employment and output determination;
4. To help students understand the meanings of inflation and other concepts related to inflation.

Learning Outcomes: after successful completion of this course, students will be able to-

1. Understand the fundamental objectives and scope of macroeconomics and to understand the evolution of macroeconomics as a distinct field
2. Define national income and various accounting methods and assess the limitations and significance of GDP as an indicator of economic health and social welfare
3. To analyze the components and determinants of aggregate demand and aggregate supply, and understand how these factors interact to influence overall economic activity
4. To explain the functions and types of money, determinants of money supply and demand, and the quantity theory of money and concept of inflation
5. To understand the concept of banking: Central and Commercial, functions and role, credit control policies of central bank and credit creation of commercial bank

UNITS	CONTENTS	L	T	P	Total Hours
I	<p>Introduction to Macroeconomics and National Income Accounting</p> <p>The concept and nature of Macroeconomics, the major issues of Macroeconomics, concepts of National Income GDP/GNP, approaches to calculating GDP/GNP and Personal Income, Nominal and Real GDP</p>	10			10
II	<p>Aggregate Demand and Aggregate Supply</p> <p>Concept of aggregate demand; Components and determinants of aggregate demand –consumption spending, government spending, investment spending and net exports; Consumption function – MPC and APC; Saving – determinants of saving – MPS and APS; Investment – determinants of investment; investment function; Concept of Aggregate supply; determinants of aggregate supply, factors shifting aggregate supply, the concept of Multiplier.</p>	13			13

III	Theory of Money Difficulties of Barter system; Definition of money, functions of money, types of money; Quantity theory of money- Fisher and Cambridge Equation. Inflation- meaning, types and causes.	10			10
IV	Banking Definition, types and role of banks, Commercial banking- functions, Credit creation, Concept of non-performing assets, Central banking- functions and role, Credit control measures: Bank rate, Open Market Operations, Variable Cash Reserve Ratio and Selective credit control measures.	12			12
TOTAL		45	-	-	45

L: Lectures

T: Tutorials

P: Practical

MODES OF IN-SEMESTER ASSESSMENT: 30 Marks

- Two Internal Examinations - **20 Marks**
- Attendance - **05 Marks**
- Others (Any one) - **05 Marks**
 - Home assignment
 - Class test/ Unit test
 - Field work
 - Viva voce
 - Seminar
 - Group discussion
 - Quiz

SUGGESTED READINGS:

- Dornbusch, R., Fischer, S. & Startz, R. (2018). *Macroeconomics* (12thed.). McGraw Hill Education
- Froyen, R.T. (2014). *Macroeconomic Theories and Policies* (10thed.). Pearson Education
- Mankiw, N.G. (2007). *Macroeconomics* (6th ed.). Worth Publishers
- Sikdar, S. (2006). *Principles of Macroeconomics*. Oxford University Press
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FYUGP (NEP) 3rd SEMESTER SYLLABUS

Course Title	:	Mathematical Methods for Economics I
Course Code	:	ECOMAJ3
Nature of the Course	:	Major
Total Credits	:	04
Distribution of Marks	:	60 (End-Sem) + 40 (In-Sem)

Course Objectives:

1. To transmit the knowledge of basic mathematics that enables the study of economic theory
2. To illustrating the method of applying mathematical techniques to economic theory in general

Learning Outcomes: On completion of this course, a student will be able to-

1. Understand foundational concepts like sets, relations and functions, evaluate limits and continuity, and apply these concepts to solve numerical problems
2. Apply rules of differentiation to analyze economic functions, including demand, cost and revenue, and intercept their economic significance
3. Use different techniques of integration to solve economic problems, including calculation of consumer's and producer's surplus.
4. Apply matrices and determinants in solving linear equations and performing market and national income model.

UNITS	COURSE CONTENTS	L	T	P	Total Hours
I	Preliminaries Set: Set and Set operations; Ordered pairs, Cartesian products and relations, number system	7	1	-	8
II	Function of one Real variable: Function and Different forms of functions; Polynomial, Rational, Exponential, Logarithmic, Explicit, Implicit, Power, Convex and Concave; Graph of function, Limit and Continuity of function.	7	1	-	8
III	Derivatives of Functions of One Independent Variable: Rules of differentiation for a function with one independent variable; Second and higher order derivatives, Slope and Curvature; Economic application of derivatives; Elasticity of demand, Cost and Revenue functions; Relation between Average and Marginal Costs, Relation between Production and Revenue function.	13	2	-	15

IV	Integration of functions Basic Rules of integration: Rules of Integration, Techniques of integration - substitution rule, integration by parts and partial fraction; Economic application of indefinite integration, Derivation of total functions from marginal functions; Definite integrals and its applications: Producer's surplus and consumer's surplus.	13	2	-	15
V	Matrix, determinant and applications: Matrices-elementary operations: matrix addition, product, rank of a matrix, Determinants and their properties, inverse of a matrix, Application of Cramer's rule for solution of a system of linear equations; Input-output analysis: static and dynamic	12	2		14
TOTAL		52	8		60

L: Lectures

T: Tutorials

P: Practical

MODES OF IN-SEMESTER ASSESSMENT: 40 Marks

- Two Internal Examinations - **20 Marks**
- Attendance - **05 Marks**
- Others (Any three) - **15 Marks**
 - Home assignment
 - Class test/ Unit test
 - Field work
 - Viva voce
 - Seminar
 - Group discussion
 - Quiz

SUGGESTED READINGS:

- A. C. Chiang & K. Wainwright (2005) Fundamental Methods of Mathematical Economics, Mcgraw Hill Education
- K. Sydsaeter, P. Hammond, Mathematics for Economic Analysis, Pearson Educational Asia: Delhi, 2002
- Prof. S. Barua, (2000), Basic Mathematics and its Economic Applications, Macmillan
- D. Salvatore: Mathematics and Statistics, Schaum's Series Tata McGraw Hill 1. K. Sydsaeter P. Hammond, Mathematics for Economic Analysis, Pearson Educational Asia: Delhi,2002
- Arindam Bora,(2019), Arthabigyant Ganitik Paddhati, Saraswati Prakashan

FYUGP (NEP) 3rd SEMESTER SYLLABUS

Course Title	:	Issues of Indian Economy
Course Code	:	ECOMAJ4
Nature of Course	:	Major
Total Credits	:	4 credits
Distribution of Marks	:	60 (End-Sem.) + 40 (In-Sem.)

Course Objectives:

1. To understand the basic issues of Indian Economy and will be able to deal with various issues related to Indian Economy
2. To enlighten the recent changes to policies initiatives taken by Indian government.

Learning Outcomes: On completion of this course, a student will be able to-

1. Develop an understanding of characteristics and some basic issues of Indian economy
2. Assess the sectoral performance of Indian economy, along with the emerging issues and relevant policy measures
3. Understand the background of economic reforms and its impact
4. Analyze India's economic interaction with the global economy and conduct a comparative assessment of India's development experience with high-performing Asian economies

UNITS	COURSE CONTENTS	L	T	P	Total Hours
I	<p>Basic Features of Indian Economy</p> <p>Characteristics of Indian economy, Estimation of National Income in India, Sectoral distribution of National Income and occupational structure, Major Issues of Development – Population, Poverty, Income Inequality, Unemployment (Concept and Policy related issues)</p>	11	1	-	12
II	<p>Sectoral Trends and Issues:</p> <p>Agricultural sector: Problem of low productivity, Green Revolution and its impact, Land Reforms, Problems of Rural credits and marketing, emerging issues of Indian Agriculture, agricultural Export.</p> <p>Industry Sector: An overview of industrial growth during pre-reform and post reform periods, role of Public sector: its performance and Issue of disinvestment, MSMEs growth and performance.</p> <p>Service sector: Growth of banking and Insurance Sector during the post reform period.</p> <p>External Sector: Problem of unfavorable balance of payments and policy measures.</p>	20	2	-	22

III	Economic Reforms and Liberalization: Economic crises-background to economic reforms; policy response: the IMF resistance; policy reform measures: Structural reforms and macroeconomic stabilization measures; impact of economic reforms; the current government initiatives: Make in India, Skill India, Digital India, startup India, Pradhan Mantri Jan Dhan Yojana References:	13	1	-	14
IV	International Comparisons: India's economic interaction with the Global economy, a comparative assessment of India's development experience with high-performing Asian economy – Singapore and China	11	1	-	12
		55	05		60

L: Lectures

T: Tutorials

P: Practical

MODES OF IN-SEMESTER ASSESSMENT: 40 Marks

- Two Internal Examinations - **20 Marks**
- Attendance - **05 Marks**
- Others (Any three) - **15 Marks**
 - Home assignment
 - Class test/ Unit test
 - Field work
 - Viva voce
 - Seminar
 - Group discussion
 - Quiz

SUGGESTED READINGS:

- Bardhan, P. (1999) "The Political Economy of Development of India", OUP
- Sen, A. and Dreeze, J. (1999) "Economic Development and Social Opportunities", OUP Rakshit, M. (2010), Macroeconomics of Post-Reform India, OUP
- Mukherjee, D. (2017). Indian economy since independence. New Central Book Agency Puri, V.K and Misra, S.K (2015). Indian Economy. Himalaya Publishing House
- Dutta, G. and A. Mahajan. *Indian Economy*, S. Chand, 72nd Edition
- Kapila, U. 2017. *Indian Economy: Performance and policies*, Academic Foundation, 18th edition
- Government of India (Various Issues) Economic Survey, Ministry of Finance, Government of India

FYUGP (NEP) 3rd SEMESTER SYLLABUS

Course Title	:	Basics of Indian Economy
Course Code	:	ECOMIN3
Nature of the Course	:	Minor
Total Credits	:	04
Distribution of Marks	:	60 (End Sem) + 40 (In-Sem)

Course Objectives:

1. To review major trends in economic indicators in India in the post-Independence period, with particular emphasis on paradigm shifts and turning points
2. To know the performance and problems of the primary, secondary and tertiary sectors of Indian economy

Learning Outcomes: On completion of this course, a student will be able to-

1. Evaluate the trajectory of India's economic development since independence and analyze the shifts in development strategies from import substitution to post-1991 globalization
2. Assess the sectoral performance of Indian economy, along with the emerging issues and relevant policy measures.
3. Understand the background of economic reforms and its impact.
4. Analyze India's economic interaction with the global economy and conduct a comparative assessment of India's development experience with high-performing Asian economies.

UNITS	COURSE CONTENTS	L	T	P	Total Hours
I	Development Strategies since Independence: India as a Developing Economy, Determinants of Economic Development, Indian Economy on the eve of independence - An overview; Development policies (1947 to 1990), the post - 1991 globalization strategies based on stabilization and Structural adjustment packages.	11	1	-	12
II	Demographic Features and Trends: Size and growth rates of population, trends in birth and death rates, Density of population, Age and Sex Composition, Demographic Dividend; National Population Policy.	11	1	-	12
III	Agriculture and its Development: Agricultural sector: Problem of low productivity, Green Revolution and its impact, Land Reforms, Problems of Rural Credits and marketing, emerging issues of Indian Agriculture, agricultural Export.	10	1	-	11

IV	Development of the Industrial and Service Sectors: An overview of industrial growth during pre-reform and post reform periods, role of Public sector: its performance and Issue of disinvestment, MSMEs growth and performance. Rule of the Service sector: growth of banking and Insurance sector during the post reform period	11	2	-	13
V	Human development: Human Development in India- Human Development indicators, Human Development across states; India's human Development record in global perspective.	11	1		12
		54	6		60

L: Lectures

T: Tutorials

P: Practical

MODES OF IN-SEMESTER ASSESSMENT: 40 Marks

- Two Internal Examinations - **20 Marks**
- Attendance - **05 Marks**
- Others (Any three) - **15 Marks**
 - Home assignment
 - Class test/ Unit test
 - Field work
 - Viva voce
 - Seminar
 - Group discussion
 - Quiz

SUGGESTED READINGS:

- Bardhan, P. (1999) "The Political Economy of Development of India", OUP
- Sen, A. and Dreeze, J. (1999) "Economic Development and Social Opportunities", OUP Rakshit, M. (2010), Macroeconomics of Post-Reform India, OUP
- Mukherjee, D. (2017). Indian economy since independence. New Central Book Agency Puri, V.K and Misra, S.K (2015). Indian Economy. Himalaya Publishing House
- Dutta, G. and A. Mahajan. *Indian Economy*, S. Chand, 72nd Edition
- Kapila, U. 2017. *Indian Economy: Performance and policies*, Academic Foundation, 18th edition
- Government of India (Various Issues) Economic Survey, Ministry of Finance, Government of India

FYUGP (NEP) 3rd SEMESTER SYLLABUS

Course Title	:	Economy of India and Assam
Course Code	:	ECOGEN3
Nature of Course	:	Generic Elective
Total Credits	:	03
Distribution of Marks	:	45 (End-Sem.) + 30 (In-Sem.)

Course Objectives:

1. To understand the basic issues of Indian Economy and will be able to deal with various issues related to Indian Economy
2. To analyze the various concepts of Assam economy with reference to trends, patterns and issues

Learning Outcomes: On completion of this course, a student will be able to-

1. Develop an understanding of characteristics and some basic issues of Indian economy
2. Assess the sectoral performance of Indian economy, along with the emerging issues and relevant policy measures.
3. Understand and analyze the various concepts of Assam economy

UNITS	COURSE CONTENTS	L	T	P	Total Hours
I	Basic Features of Indian Economy: India as a Developing Economy, Determinants of Economic Development, Major issues of development. Characteristics of Indian economy, Estimation of National Income in India, Sectoral distribution of National Income and occupational structure	10			10
II	Agriculture and its Development: Agricultural sector: Problem of low productivity, Green Revolution and its impact, Land Reforms, Problems of Rural Credits and marketing, emerging issues of Indian Agriculture, agricultural Export.	10			10
III	Development of the Industrial and Service Sectors: An overview of industrial growth during pre-reform and post reform periods, role of Public sector: its performance and Issue of disinvestment, MSMEs growth and performance. Rule of the Service sector: growth of banking and Insurance sector during the post reform period	10			10

IV	Issues of Assam Economy: Resources of the State- Mineral, Forest, and Water resources, Human Resources. Trends and Pattern of Primary, Secondary and Tertiary sectors. Performance and standing of Assam’s economy in the national context. Economic problems of Assam – Unemployment, Poverty, Immigration and its impacts, Flood and erosion problem, Border area development.	15			15
TOTAL		45			45

L: Lectures

T: Tutorials

P: Practical

MODES OF IN-SEMESTER ASSESSMENT: 30 Marks

- Two Internal Examinations - **20 Marks**
- Attendance - **05 Marks**
- Others (Any one) - **05 Marks**
 - Home assignment
 - Class test/ Unit test
 - Field work
 - Viva voce
 - Seminar
 - Group discussion
 - Quiz

SUGGESTED READINGS:

- Bardhan, P. (1999) “The Political Economy of Development of India”, OUP
- Sen, A. and Dreeze, J. (1999) “Economic Development and Social Opportunities”, OUP Rakshit, M. (2010), Macroeconomics of Post-Reform India, OUP
- Mukherjee, D. (2017). Indian economy since independence. New Central Book Agency Puri, V.K and Misra, S.K (2015). Indian Economy. Himalaya Publishing House
- Dutta, G. and A. Mahajan. *Indian Economy*, S. Chand, 72nd Edition
- Kapila, U. 2017. *Indian Economy: Performance and policies*, Academic Foundation, 18th edition
- Government of India (Various Issues) Economic Survey, Ministry of Finance, Government of India

FYUGP (NEP) 4th SEMESTER SYLLABUS

Course Title	:	Advanced Microeconomics
Course Code	:	ECOMAJ5
Nature of the Course	:	Major
Total Credits	:	04
Distribution of Marks	:	60 (End Sem) + 40 (In-Sem)

Course Objectives:

1. To help students know the input market and how demand for and supply of labour is computed
2. To familiarize the students with concepts of general equilibrium and social welfare economics
3. To introduce the students with the concept of oligopoly market structure and its application in real life situation
4. To help students understand the meanings of game theory and competitive strategies in economics

Learning Outcomes: after successful completion of this course, a student will be able to-

1. Evaluate the features of input market, explain the features of firms using one and two variable factors respectively in the short run and long run labour market
2. Analyze the concept of general equilibrium, interrelations and interdependence of market; efficiency in exchange, efficiency in production and also the old and new welfare economics
3. Evaluate collusive behaviour in oligopoly, including cartels and price leadership
4. Understand game theory and competitive strategies in economics such as pure game, mixed game, repeated games, prisoner's dilemma and the concept of nash equilibrium

Units		L	T	P	Total Hours
I	Oligopoly Features, Short-run pricing and output decisions, Cournot model, Bertrand model, Kinked demand model, Collusive oligopoly model, Cartels, Price Leadership model	12	3	-	15
II	General Equilibrium, Efficiency and Welfare Economics General equilibrium analysis, equilibrium and efficiency under pure exchange and production, equity and efficiency. Basic issues of welfare Economics, Pigouvian welfare Economics, Pareto Optimality, Compensation principle, the social welfare Function	12	3	-	15

III	Input Market Labour, Land and capital market- Basic concepts; Derived Demand: Productivity of an input, Marginal Productivity theory, demand for labour, input demand curves, shifts in input demand curves, competitive labour market, labour market and public policy	12	3	-	15
IV	Game theory and Competitive Strategies Concepts, importance and application of game theory, types of game, pure and, maximin strategies, dominant strategies, mixed strategies Concept of Nash Equilibrium, Prisoner's dilemma, Repeated games, sequential games, threats, commitments and credibility, Entry deterrence.	12	3	-	15

L: Lectures

T: Tutorials

P: Practical

MODES OF IN-SEMESTER ASSESSMENT: 40 Marks

- Two Internal Examinations - **20 Marks**
- Attendance - **05 Marks**
- Others (Any three) - **15 Marks**
 - Home assignment
 - Class test/ Unit test
 - Field work
 - Viva voce
 - Seminar
 - Group discussion
 - Quiz

SUGGESTED READINGS:

- H. R. Varian (2010); Intermediate Microeconomics; A Modern Approach, 8th Edition, W.W. Norton and Company/Affiliated East-West Press (India)
- R. S. Pindyck, D.N. Rubinfeld and P. L. Meheta (2009); Microeconomics, 7th Edition, Pearson, New Delhi
- C. Snyder and W. Nicholson (2012); Microeconomics Theory: Basic principles and extensions, 11th edition, Cengage Learning Delhi, India
- G. S. Maddala and Ellen Miller, Microeconomics; Theory and Application, Mc. Graw Hill Education, Tenth Reprint, 2013, New Delhi Edition
- Ushamanar Byastigata Arthbigyan, Minoti Gogoi Baruah, Dr. Bidisha Mahanta Hazarika, Dr. Brogen Ch. Neog and Arindam Bora

FYUGP (NEP) 4th SEMESTER SYLLABUS

Course Title	:	Development Economics
Course Code	:	ECOMAJ6
Nature of the Course	:	Major
Total Credits	:	04
Distribution of Marks	:	60 (End Sem) + 40 (In-Sem)

Course Objectives:

1. To impart the ideas of growth and development among the learners;
2. To acquaint the students about different growth strategies and models;
3. To familiarize the students with the concepts and implications of poverty and inequality; and
4. To provide the students with the knowledge of various institutional structures under which various development policies have to be adopted.

Learning Outcomes: After successful completion of this course students will be able to-

1. Understand the fundamental concepts and distinctions between economic growth and development, and evaluate the factors influencing economic development.
2. Analyze various development strategies and their implications for achieving sustainable economic growth.
3. Understand and apply various economic growth models to analyze long-term economic performance.
4. Understand the concepts and measurement of poverty and inequality, and explore their relationship with economic development.
5. Evaluate the role of political institutions and governance in shaping economic development and performance.

Units		L	T	P	Total Hours
1	Conceptions of growth and development: Evolution of Development Economics; Meaning of economic development and underdevelopment; distinction between economic growth and development; measurement and indicators of economic development; factors affecting growth; importance of agriculture; industry and infrastructure in economic development	9	3	-	12
2	Strategies of Development: Stages of Economic growth- Rostow; Low level equilibrium trap, the critical minimum effort hypothesis; Big push theory, Balanced vs. Unbalanced growth; Choice of Technique	9	3	-	12

3	Growth Models: Classical growth model; Harrod-Domar model; Kaldor's Model, Solow model and its variants, Meade Model, Endogenous growth model- Romer's Version.	9	3	-	12
4	Poverty and Inequality: Concept and Measures of poverty- Head count ratio, Sen's Index, HPI, MPI. Inequality measures- Gini Coefficient and Lorenz Curve; Connections between inequality and development; Mechanisms that generate poverty traps and path dependence of growth processes	9	3	-	12
5	Political Institutions and the Functioning of the State Determinants of democracy; Alternative institutional trajectories and their relationship with economic performance; Relationship between democracy and economic development; Within-country differences in the functioning of state institutions; State ownership and regulation; Government failures and Corruption.	9	3	-	12
Total		45	15	-	60

L: Lectures

T: Tutorials

P: Practical

MODES OF IN-SEMESTER ASSESSMENT: 40 Marks

- Two Internal Examinations - **20 Marks**
- Attendance - **05 Marks**
- Others (Any three) - **15 Marks**
 - Home assignment
 - Class test/ Unit test
 - Field work
 - Viva voce
 - Seminar
 - Group discussion
 - Quiz

SUGGESTED READINGS:

- Debraj Ray, Development Economics, Oxford University Press, 2009
- Partha Dasgupta, Economics, A Very Short Introduction, Oxford University Press, 2007.
- Abhijit Banerjee, Roland Benabou and Dilip Mookerjee, Understanding Poverty, Oxford University Press, 2006.
- Thomas Schelling, Micro motives and Macro behavior, W. W. Norton, 1978.
- Albert O. Hirschman, Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States, Harvard

University Press, 1970.

- Raghuram Rajan, *Fault Lines: How Hidden Fractures Still Threaten the World Economy*, 2010.
- Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action*, Cambridge University Press, 1990.
- Dani Rodrik, *The Globalization Paradox: Why Global Markets, States and Democracy Can't Coexist*, Oxford University Press, 2011.
- Michael D. Bordo, Alan M. Taylor and Jeffrey G. Williamson (ed.), *Globalization in Historical Perspective*, University of Chicago Press, 2003.
- Yujiro Hayami and Yoshihisa Godo : *Development Economics*, Oxford Publication, 2009
- A. P. Thirlwall : *Economics of Development*, Palgrave Macmillan
- Unnayan Arthasastra, Dr. Rofique Ahmed
- Unnayan Arthaniti – 1, Minoti Gogoi Baruah, Dr. Bidisha Mahanta Hazarika, Dr. Brogen Ch. Neog and Arindam Bora

FYUGP (NEP) 4th SEMESTER SYLLABUS

Course Title	:	Mathematical Methods for Economics II
Course Code	:	ECOMAJ7
Nature of Course	:	Major
Total Credits	:	04
Distribution of Marks	:	60 (End-Sem.) + 40 (In-Sem.)

Course Objectives:

1. To enable the learners to extend their knowledge of derivatives to functions of several variables as well as their applications
2. To foster a solid understanding of various optimisation techniques and their application in relevant economic fields
3. To provide basic knowledge of differential and difference equation and their economic application

Learning Outcomes: On completion of this course, a student will be able to-

1. Use partial and total differentiation to analyze and solve problems in economics, including production and consumer
2. Apply methods of unconstrained optimization to solve economic problems involving single and multiple variables
3. Use Lagrange multipliers to solve constrained optimization problems and apply these methods to consumer's and producer's equilibrium
4. Understand and solve first order linear differential equations and exact differential equations, with applications to economic problems
5. Understand and apply first-order difference equations to model and analyze economic phenomena

UNITS	COURSE CONTENTS	L	T	P	Total Hours
I	Derivatives of Functions of several variables: Partial and Total differentiation and Economic applications, Comparative Static Analysis of Market Model and National Income Model; Indifference curve analysis; Expansion Path, Production Function Analysis- Homogeneous Functions and Euler's Theorem; Cobb Douglas Production Function and its Properties.	14	2		16
II	Unconstrained optimization: Unconstrained optimization with one variable and Economic Applications; Unconstrained optimization with more than one variable and Economic Applications- Discriminating Monopoly, multiproduct monopoly.	14	2		16

III	Constrained optimization with equality constraints: Constrained Extreme, Lagrange Multiplier method, Economic application of Constrained Optimization - consumer's equilibrium and producer's equilibrium.	10	2		12
IV	Differential Equation: First order linear differential equations; exact differential equation, Economic applications.	7	1		8
V	Difference equation: First order Difference equation and its Economic Applications	7	1		8
TOTAL		52	8		60

L: Lectures

T: Tutorials

P: Practical

MODES OF IN-SEMESTER ASSESSMENT: 40 Marks

- Two Internal Examinations - **20 Marks**
- Attendance - **05 Marks**
- Others (Any three) - **15 Marks**
 - Home assignment
 - Class test/ Unit test
 - Field work
 - Viva voce
 - Seminar
 - Group discussion
 - Quiz

SUGGESTED READINGS:

- A. C. Chiang & K. Wainwright (2005) Fundamental Methods of Mathematical Economics, Mcgraw Hill Education
- K. Sydsaeter P. Hammond, Mathematics for Economic Analysis, Pearson Educational Asia: Delhi,2002
- Prof. S. Barua, (2000), Basic Mathematics and its Economic Applications, Macmillan
- D. Salvatore: Mathematics and Statistics, Schaum's Series Tata McGraw Hill
- Arindam Bora,(2020), Arthabigyant Ganitik Pranali, Saraswati Prakashan

FYUGP (NEP) 4th SEMESTER SYLLABUS

Course Title	:	Public Finance
Course Code	:	ECOMAJ8
Nature of the Course	:	Major
Total Credits	:	04
Distribution of Marks	:	60 (End Sem) + 40 (In-Sem)

Course Objectives:

1. To acquaint the learners about the basics of public finance
2. To impart concepts to the students about public revenue, public expenditure, public debt and government budgeting

Learning Outcomes: after completion of this course the learner will be able to learn-

1. Evaluate the subject matter of public finance
2. Analyze the characteristic of a good tax system, assess the distribution of the burden of taxation and analyze the effects of taxation
3. Assess the role of public expenditure and public debt and examine the reasons for their growth
4. Examine the role of government budget and evaluate the latest union budget of India
5. Evaluate the role of fiscal policy in developed and less developed countries

	Units	L	T	P	Total hours
1	Nature and Scope of Public Finance: Origin and development of public finance, meaning and subject matter, public finance versus private finance, role of public finance, need for public sector in market economies, public goods – characteristics, type of public goods, public versus private goods, the Free Rider problem.	10			10
2	Public Revenue: Tax and non-tax revenue, sources of tax and non-tax revenue, characteristics of a good tax systems, Principles of Taxation- the Benefit Principle and Ability to Pay principle, Impact shifting and incidence of taxes – meaning and importance. The Modern theory of Incidence and Shifting.	14			14
3	Public Expenditure and Public Debt: Public Expenditure: meaning, objectives and classification of public expenditure, Wagner’s law of public expenditure, control of public expenditure, Effects of Public Expenditure on production, distribution and stabilization. Public Debt: Meaning and classification of public debt, mechanism of public borrowing, sources of public borrowing, reasons for the growth of public debt, redemption of public debt, growth of public debt in India.	14			14
4	Government Budgeting: Meaning, objectives and components, role of budget, budget framing, types of government budget, concepts of deficit – revenue deficit, budgetary deficit, fiscal deficit and primary deficit, budgetary policy in India, budgetary trends of receipts and expenditure of the central government, Study of the latest Union Budget.	10			10

5	Fiscal Policy and Tax System Fiscal Policy: Meaning and evolution of fiscal policy, objectives of fiscal policy in developed and less developed economies, major fiscal reforms in India Tax System: Tax system, Main features of India's tax system, changing tax structure of India, major tax reforms since 1991.	12		12
Total		60		60

L: Lectures

T: Tutorials

P: Practical

MODES OF IN-SEMESTER ASSESSMENT: 40 Marks

- Two Internal Examinations - **20 Marks**
- Attendance - **05 Marks**
- Others (Any three) - **15 Marks**
 - Home assignment
 - Class test/ Unit test
 - Field work
 - Viva voce
 - Seminar
 - Group discussion
 - Quiz

SUGGESTED READINGS:

- R. K. Lekhi, Joginder Singh: Public Finance
- Dr. Atul Goswami, Dr. Chandan Goswami: Sarkari Bitto Bigyan Tatto aur Prayug
- Dr. Nanigopal Goswami: Sarkari Bitto

FYUGP (NEP) 4th SEMESTER SYLLABUS

Course Title	:	Fundamental Mathematics for Economics
Course Code	:	ECOMIN4
Nature of Course	:	Minor
Credits	:	04
Distribution of Marks	:	60 (End-Sem.) + 40 (In-Sem.)

Course Objectives:

1. To transmit the knowledge of basic mathematics that enables the study of economic theory.
2. To illustrating the method of applying mathematical techniques to economic theory in general

Learning Outcomes: On completion of this course, a student will be able to-

1. Understand foundational concepts like sets, relations and functions, evaluate limits and continuity, and apply these concepts to solve numerical problems.
2. Applying rules of differentiation to analyze economic functions, including demand, cost and revenue, and intercept their economics significance.
3. Use different techniques of integration to solve economic problems, including calculation of consumer's and producer's surplus.
4. Apply matrices and determinants in solving linear equations and performing market and national income model.

UNITS	COURSE CONTENTS	L	T	P	Total Hours
I	Preliminaries: Set and set operations; Ordered pairs, Cartesian products and relations, Number system.	8		-	8
II	Function of one Real variable: Function and Different forms of function; Polynomial, Power, Exponential, Logarithmic, Convex and Concave; Limit and Continuity of function.	9	1	-	10
III	Derivatives of Functions of One Independent Variable: Rules of differentiation for a function with one independent variable; Second and higher order derivatives, Economic application of derivatives; Elasticity of demand, Cost and Revenue functions; Relation between Average and Marginal Costs,	13	2	-	15

IV	Integration of functions: Basic Rules of integration; Techniques of integration substitution rule, integration by parts and partial fraction; Derivation of total functions from marginal functions; Definite integrals and its applications: Producer's surplus and consumer's surplus.	10	2	-	12
V	Matrix, Determinant and Applications: Matrices-elementary operations: matrix addition, product, rank of a matrix, Determinants and their properties, inverse of a matrix, Cramer's rule and application in Economics	13	2		15
	Total	53	07		60

L: Lectures

T: Tutorials

P: Practical

MODES OF IN-SEMESTER ASSESSMENT: 40 Marks

- Two Internal Examinations - **20 Marks**
- Attendance - **05 Marks**
- Others (Any three) - **15 Marks**
 - Home assignment
 - Class test/ Unit test
 - Field work
 - Viva voce
 - Seminar
 - Group discussion
 - Quiz

SUGGESTED READINGS:

- A. C. Chiang & K. Wainwright (2005) Fundamental Methods of Mathematical Economics, Mcgraw Hill Education
- K. Sydsaeter, P. Hammond, Mathematics for Economic Analysis, Pearson Educational Asia: Delhi, 2002
- Prof. S. Barua, (2000), Basic Mathematics and its Economic Applications, Macmillan
- D. Salvatore: Mathematics and Statistics, Schaum's Series Tata McGraw Hill 1. K. Sydsaeter P. Hammond, Mathematics for Economic Analysis, Pearson Educational Asia: Delhi,2002
- Arindam Bora,(2019), Arthabigyant Ganitik Paddhati, Saraswati Prakashan