

# **GIRIJANANDA CHOWDHURY UNIVERSITY, ASSAM**

Hatkhowapara Azara, Guwahati-781017

## **Syllabus**

# Department of Economics Semester: Third (III) Programme: Post Graduate Programme

(M.A./M. Sc in Economics)

(The Revised syllabus is passed under Programme Committee and placed in the 6<sup>th</sup> BOS, SHSS)

(Prof. Jayanta K. Sarmah,GU) (Prof. Shantanu Chakravarty, Dean) (Dr. Sampurna Bhuyan)

### **Semester-III**

**Course: Public Finance and Policy Analysis** 

(Core)

Course Code: MEM23601T

Total sessions: 60

Total Credit: 04(four) L-T-P: 4-0-0

**Course Objectives:** 

1. Acquire the skills to critically analyze tax policies, public budgets and government

spending priorities, taking into account their impact on individuals, businesses and the

overall economy.

2. Equip students with analytical tools and frameworks necessary to evaluate various forms

of government intervention such as subsidies, regulations and public goods provision, in

addressing market failures and achieving social welfare objectives.

3. Appraise the effectiveness and efficiency of different fiscal policies and public

expenditure programs in achieving macroeconomic stability, promoting economic growth

and addressing social inequalities.

**Course Outcomes:** 

CO1: Understand the basic concepts, definitions and theories related to public finance such

as taxation, government spending, fiscal policy and public debt.

CO2: **Identify** the role of government in the economy and the significance of public finance

in achieving economic stability and growth.

CO3: Assess the equity and efficiency implications of tax incidence, distributional effects of

government transfers and the efficiency of public sector operations.

CO4: Evaluate the effectiveness of various fiscal policies in achieving macroeconomic

objectives, such as price stability, full employment and economic growth.

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## **SYLLABUS**

Unit	Contents	Hours
no		
1		1.7
1.	Role of Government and Theory of Public Goods: Economic Rationale of	15
	Mixed Economy; Role of Government in a State - Allocation, Distribution	
	and Stabilization. Market Failure and the rationale for Government	
	Intervention- Market failure in the contexts of Natural Monopolies, Non-	
	Existence of Futures Markets, Asymmetric Information; The Problem of	
	Externalities and their Internalization, Theory of Second best, Theory of	
	Public Goods: Concept, Characteristics and Types of Public Goods; Theory	
	of Club Goods .	
2	Theory of Public Choice Public Choice – Reasons for Public Choice;	10
	Public, Choice under Direct Democracy, Unanimity rule, Public Choice	
	under Representative Democracy – Downs Model on Demand and Supply of	
	Government Policy; Niskanen Model of Bureaucratic Behaviour.	
3.	Tax Incidence, Public Expenditure and Public Debt: Tax Incidence –	15
	Partial and General Equilibrium Analysis; Mieszkowski Analysis; Keynesian	
	Short Run Mode; Dynamic Analysis. Theory of Public Expenditure: Bowen	
	Model, Lindahl Model. Public Debt – Objectives and Sources; Classification	
	and Effect; Buchanan Thesis, Crowding out and Ricardian Equivalence,	
	Public Debt and Inflation; Public Debt Management and Redemption of	
	Public Debt .	
4.	Government Budgeting & Fiscal Policy: Budgeting-Importance and	10
	Classification, Budget Multiplier- Balanced and Unbalanced, Zero Base	
	Budgeting (ZBB), Union Budget of India-trend and pattern of Expenditure	
	and Receipts, Budgetary Policy of India- Tax reform, Types of taxes, Goods	
	and Service Tax, FRBM Act, Fiscal policy – Instruments, Importance and	
	Objectives.	

5. **Fiscal Federalism**: Principles of Multi-Unit Finance; Assignment of Functions among Levels of Government; Tiebout Model and Citizen's Mobility, Theory of Intergovernmental Grants-types and effects, Role of Finance Commission in India and Local Finance

#### **Books Recommended:**

- 1. Buchanan, J. M. (1970), *The Public Finances*, Richard D.li-win, Homewood.
- 2. Jha, R. (1998), Modern Public Economics, Routledge, London.
- 3. Musgrave R. A. and Musgrave P. B. (2001), *Public Finance in Theory and Practice*, McG raw Hill Book Company, New Delhi.

**Course: Indian Economy (Core)** 

Course Code: MEM23602T

**Semester: III** 

**Total sessions: 60** 

Total Credit: 04(four) L-T-P: 4-0-0

#### **Course Objectives:**

- 1. Acquire a comprehensive understanding of the unique economic challenges and opportunities faced by the Indian economy as a whole agricultural producers, consumers and policy makers at both local and global levels.
- Apply economic theories and quantitative methods to analyze issues of economic transformation on the path of development such as food security, land use dynamics and rural development, integrating interdisciplinary perspectives into economic decisionmaking processes.
- 3. Develop analytical skills to evaluate the impact of technological advancements, economic policies environmental factors and socio-economic trends on agricultural production, distribution and consumption patterns and external relations on the economy of India.

#### **Course Outcomes:**

- Co1. **Understand** the challenges and opportunities associated with independent India and its related issues including trade policies, foreign exchange reserves and balance of payments.
- Co2. **Explain** the data and statistics related to poverty, unemployment, agricultural growth and food security etc and their implications for the Indian economy.
- Co3. **Examine** the various types of unemployment prevalent in India, sectoral composition of agriculture, various plans and their achievements.
- Co4. **Design** comprehensive strategies for improving agricultural productivity, market access and income distribution.

### **Syllabus**

Unit no	Contents	Hours
1.	Basic features and problems of Indian Economy: Status of Indian Economy at the time of independence; basic characteristics and major issues of development of Indian Economy, Problems of Poverty, Unemployment: nature of unemployment in India, estimates of Unemployment, various schemes to reduce unemployment in India,	15
	Inflation, income inequality, Black money in India: factors responsible for generation of black money, its impact on economic and social systems	
2	Sectoral composition of Indian Economy: Issues in Agriculture sector in India, land reforms Green Revolution and agriculture policies of India, Agricultural growth and productivity, causes of low productivity and measures to increase it, food security in India, public distribution system, Industrial growth and planning, small scale and cottage industries, state of service sector in India.	15

3.	Economic Planning and Development: Economic Planning in India ,	15
	Planning commission v/s NITI Aayog, Five Year Plans; Tenth five year	
	plan, Eleventh five year plan: targets, achievements, poverty in India:	
	estimates, economic reforms, international comparison of poverty, ,	
	Centre state Finance Relations, Finance commission in India.	
4.	External sector in India: - India's foreign trade value composition and	15
	direction, Balance of payment since 1991, Government policy towards	
	foreign capital, Foreign Collaboration in the Post-independence period,	
	impact of foreign aid on India's Economic Development, problems of	
	Foreign aid, FDI in India, Impact of Globalization on Indian Economy,	
	WTO and India.	

### **Text Books& Reference Books:**

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

**Course: Summer Internship** Course Code: MEM23603R

Semester: III

**Total Credit: 04(four)** 

L-T-P: 0-0-8

**Course Objectives** 

1. To give an insight into the working of the real organizations.

2. to gain deeper understanding in specific functional areas.

3. To appreciate the linkages among different functions and departments.

4. To develop perspective about business organizations in their totality.

**Course Outcomes** 

CO1. Understand connections between internship experiences and course work across the

curriculum.

CO2. Experience the present socio-economic problems and issues of local, regional and global

world.

Methodology:

Students will have to prepare a project report. It can be an empirical work based on field survey

data or secondary data. The project report will be evaluated by the departmental teachers.

Students can decide about the topic in consultation with the guides from the organisation and/or

the concerned teacher/teachers of the department. Students will have to prepare the project

reports on their own. There can be some demonstration sessions about the use of field survey

data or secondary data in the context of economics. In case of field survey, the concerned

teacher/teachers can give a guideline for the questionnaire and can administer the field survey to

be done by the students

**Evaluation:** As per University norms.

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## **Course: Econometric Methods**

Course code: MEM23620T

**Semester: III** 

**Total sessions: 60** 

Total Credit: 04(four) L-T-P: 4-0-0

### **Course Objective:**

- 1. To provides a comprehensive introduction to basic econometric concepts and techniques
- 2. To learn how to conduct empirical studies.
- 3. To analyse and interpret results from quantitative and empirical data.

### **Course Outcome:**

- CO1: Understand the concepts of least-square, causality, simulation and time series analysis.
- CO2. **Apply** knowledge of econometrics to resolve dynamic problems of an economy.
- CO3. **Analyse** economic data based on a broad knowledge of the regression model, likelihood methods, simultaneous equation models and time series methods.
- CO4: Estimate the parameters of the model in a correct way by using economic data

Unit	Content	Hours
1	Generalised Least Squares and Maximum Likelihood Estimation:	15
	Introduction to GLS; Non-spherical Disturbance and GLS Feasible GLS	
	and its Properties Seemingly Unrelated Regression Estimation;	
	Maximum Likelihood Method-Likelihood Ratio, Wald and Scope Test.	
2	Non-Linear Estimation: Non-LinearLeastSquaresandIterationprocess—	15
	ModelswithBinaryDependentsVariables– Logit and Probit Models.	
3	Simultaneous Equation Models: Formalization of Identification	15
	Problem-Order and Rank Conditions of Identification—Recursive	

	Models–Methods of Estimation: IV, 2SLS, 3SLS and FIML–Simulation and Forecasting.	
4	Time Series Modelling: Univariate Time Series Modelling, -	15
	Autocorrelation Function and Correlogram–Basic Features	
	ofAR,MA,ARMAandARIMAmodels-TrendversusDifferenceStationary-	
	Co-integration, Error Correction Mechanism and ARDL Granger	
	Causality and VAR	

#### **Text Book:**

- 1. Christopher Dougherty, (2007). Introduction to Econometrics, Oxford University Press, 3rd edition, Indian Edition, 15
- 2. Gujarati, D. and S. Sangeetha (2007), Basic Econometrics, 4e, McGraw Hill International.

#### **Reference Books:**

- 1. Jeffery M Wooldridge, Introductory Econometrics: A Modern Approach
- 2. Pindyck and Rubinfeld, Econometric Models and Econometric Forecasts, McGraw Hill.

**Course: Behavioral Economics(Elective)** 

Course code: MEM23621T Semester: III Total sessions: 60

Total Credit: 04(four) L-T-P: 4-0-0

## **Course Objective:**

- 1. To understand the scope of interaction between psychological phenomena and economic variables.
- 2. To develop perspectives about economic phenomena outside the spectrum of core economic theories and find out their importance in making financial decisions.

### **Course Outcome:**

CO1: **Remember** the issues, theories and concepts related to behavioral economics.

CO2. **Understand** how the standard assumptions in economics translate into predicted behavior.

CO3: **Apply** behavioral concepts to solve different issues related the economy, business, environment and society.

CO4: **Evaluate** the application of behavioral concepts in individual decision making.

## **Syllabus**

Unit	Content	Hours
1		10
1	Introduction to Behavioral Economics: Nature of Behavioral economics;	10
	Methodological approach; Origins of behavioral economics; Neo-classical	
	and behavioral approaches to studying economics.	
2	Foundations of Behavioral Economics:	15
	Values; Preferences and Choices; the standard model; Axioms,	
	assumptions and definitions; The neuro scientific basis of utility Beliefs;	
	Heuristics and Biases; The standard model; Probability estimation; Self-	
	evaluation bias- Projection bias- Causes of irrationality	
3	Decision Making under Behavioral Economics: Decision making under	20
	risk and uncertainty; Risk based assessment; Prospect theory; Reference	
	points; Loss Aversion; Shape of utility function; Decision weighting Mental	
	accounting; Nature and components of mental accounting; Framing and	
	editing; Budgeting and fungibility; Choice bracketing and dynamics	
4	Strategic interaction: Nature of behavioral game theory; mixed strategies;	15
	Bargaining; Social Preferences: Altruism, envy, fairness and justice;	
	Intentions, reciprocity and trust; Limited strategic thinking.	

## Text Books:

1. Angner, E. (2016). A Course in Behavioral Economics. (2nded.). New York: Palgrave Macmillan.

2. Wilkinson, N., & Klaes, M. (2012). An Introduction to Behavioral Economics. New York: Palgrave Macmillan.

#### **Reference Books:**

- 1. Ariely, D. (2008). Predictably Irrational. New York: Harper & Collins.
- 2. Cartwright, E. (2017). Behavioral Economics. London: Routledge.
- 3. Kahneman, D., &Tversky, A. (2013). Choices, Values, and Frames. In Handbook of The Fundamentals of Financial Decision Making: Part I (pp. 269-278).

### Course: Fundamentals of Data Analytics(Elective)

Course code: MEM23622T

**Semester: III** 

**Total sessions: 60** 

Total Credit: 04(four) L-T-P: 4-0-0

## **Course Objectives:**

- 1. To present an overview of data analytics decision making tools and methods.
- 2. To develop in depth understanding of the key technologies in data science and business analytics
- 3. To facilitate informed decision making

#### **Course Outcome:**

- CO1. **Understand** about the type of data, models, and methods to be used for effective decision making.
- CO2. **Explain** the concepts and methods of business analytics.
- CO3. **Apply** statistical analysis and technologies on data to find trends and solve local and global problems.
- CO4: **Evaluate** different socio-economic issues scientifically with the help of different statistical and computer programming approach

# **Syllabus**

Unit	Content	Hours
1	Data Analytics:	15
	Introduction, types, characteristics, and advantages of data analytics;	
	Overview of Analytic Tools: Excel as an analytic tool, Data Visualization	
	in Tableau, Use of R Programming (Elementary idea)	
2	Descriptive Statistical Techniques:	15
	Central tendency, Dispersion, Skewness and Kurtosis. Correlation and	
	Regression: Simple, Partial and Multiple.	
3	Probability Theory:	15
	Concept and Approaches, Application of Additive and Multiplication	
	Laws, Baye's Theorem, Mathematical Expectations.	
	Probability Distribution: Binomial, Poisson, Normal.	
	Inferential Statistics: Sampling, parameter and statistic, Sampling and	
	non-sampling errors.	
4	Hypothesis Testing: Basics of hypothesis testing: Null and alternative	15
	hypothesis	
	Parametric tests: t-test and Analysis of Variance – one way classification,	
	two-way classification; Chi-Square test &its application. An introduction to	
	non -parametric tests.	

## **Text Books**:

- 1. Abbot D. Applied Predictive Analytics: Principles and Techniques for the Professional Data Analyst; Wiley.
- 2. Bajpai, Naval. (2013) Business Statistics, 2<sup>nd</sup> edition, Pearson Education.

## **Reference books:**

1. Davenport H., Harris J.G. and Morison R. (2010) Analytics at Work: Smarter Decisions, Better Results, 1<sup>st</sup> ed. Harvard Business Review Press.

2. Davenport, H., Harris J.G. (2007), Competing on Analytics: The New Science of Winning, 1<sup>st</sup>

edition, Harvard Business Review Press.

3. Davis and Pecar (2011), Business Statistics using Excel,1st ed. Oxford University Press

4. Gupta, S.P. and Gupta, M.P., (2019) Business Statistics, Sultan Chand and Sons.

5. James R. Evans, (2021) Business Analytics, 3<sup>rd</sup> edition, Pearson Education.

6. Siegel E. (2016), Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or

Die, 1<sup>st</sup> edition, Wiley.

**Course: Economics of Agriculture (Elective)** 

Course Code: MEM 23623T

**Semester: III** 

**Total sessions: 60** 

Total Credit: 04(four) L-T-P: 4-0-0

**Course Objectives:** 

1. Apply economic models and theories to analyze real-world issues in agriculture such a

price fluctuation, risk management and resource allocation.

2. Evaluate the effectiveness of agricultural prices and interventions in achieving desired

outcomes such as food security and sustainability.

3. Compare and contrast different economic systems and policy approaches to agricultural

development across regions and countries.

**Course Outcomes:** 

Co2. Understand the economic efficiency and equity of alternative agricultural

production systems and resource allocation strategies.

Co2. Apply economic models and frameworks to analyze the behavior of agricultural

markets under different scenarios.

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- Co3. **Evaluate** the economic impact of government interventions such as price supports, subsidies and agricultural trade policies.
- Co4. **Formulate** economic theories with interdisciplinary perspectives to propose innovative solutions for enhancing agricultural productivity, profitability and sustainability.

## **Syllabus**

Unit no	Contents	Hours
1.	Agricultural Economics: Meaning, Scope and Role in economic	15
	development; Interface between Agriculture and Industry; prescription of	
	transforming traditional agriculture; Land Reforms, Agriculture Development	
	during Planning Periods; Green Revolution; Growth, Productivity and	
	Regional Disparities in Indian Agriculture; Agrarian Crisis and Farmer	
	Suicide	
2	Agricultural marketing in Indian Context: Basics; Agricultural Marketing:	15
	Existing Structure, Problems, Costs and Efficiency in the markets, Marketing	
	Reforms, Innovations in Agricultural Marketing System, Inter-linked	
	Markets, Value Chain, Market Reforms, Indebtedness.	
3.	Agricultural Price Policy in India-instruments and assessment: Food	15
	Security and Public Distribution System (PDS), Agricultural Finance: Role,	
	Agencies, problems, Policies.	
4.	Cooperative agriculture in India: Organization, Structure, Functions, Inter-	15
	sectoral terms of trade; Agricultural subsidies - Nature, Trends and	
	Distributional Implications; Agricultural Exports: Nature, Trend,	
	Composition; WTO and Indian agriculture.	

### **Books recommended:**

1. Acharya, S.S. and Agarwal, N.L. (2012). Agricultural Marketing in India. Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi.

- 2. Bansil, P.C. (2017). Economic Problems of Indian Agriculture. Daya Publishing House, New Delhi.
- 3. Bhalla, G. S. and Gurmail S. (2001). Indian Agriculture: Four Decades of Development. New Delhi: Sage Publications.
- 4. Chand, R. (2012). Development Policies and Agricultural Markets. Economic and Political Weekly, 47 (52): 53-63. 5. Chand, R., S SRaju, S. Garg and L.M. Pandey (2011).

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