গড়গাঁও মহাবিদ্যালয়

# GARGAON COLLEGE

**TEACHING PLAN**

**DEPARTMENT OF ECONOMICS**

**JULY 2020 - JUNE 2021**

# GARGAON COLLEGE
# TEACHING PLAN
## Course: B. A.
## Session: Odd semester (July to December, 2020)

**Subject:** ECONOMICS
**Name of the Teacher:** DR. RIMJIM BORAH
**Methods to be applied:** Lecture, analytical and activity method, interaction and discussion.
**Teaching Materials:** Green Board, Chalk Pencil, Duster, Book, Journal, Newspaper, Magazine, Periodicals, Laptop, Projector.

| Paper Code/ Title | Allotted Unit/ Topic | No. of Class required | Detail of the topics to be taught & class required | No. of tutorials |
|---|---|---|---|---|
| **1st Semester (Honours)** **(CBCS)** **Mathematical Methods for Economics – I** **ECNHC102** | **Unit: 3** Derivative of one real variable | 15 | • Differentiable functions: Properties [1] • Derivative and slope of a curve [1] • Geometric Interpretation of derivative [1] • Rules of differentiation for a function with one independent variable [3] • Economic Application of derivatives [3] • Elasticity of demand [1] • Cost and revenue functions [1] • Relation between Average and Marginal costs [2] • Second and higher order derivatives and application in Economics [2] | 3 |
| | **Unit: 4** Integration of Functions | 15 | • Indefinite Integrals: Rules of Integration [2] • Techniques of Integration- Substitution rule [2] • Integration by parts and partial fraction [2] • Application to economic problems [3] • Derivation of total functions from marginal functions [2] • Definite Integrals [2] • Properties of definite integrals • Application in case of consumer's surplus and producers surplus [2] | 3 |
| **1st Semester (Generic)** | **Unit: 5** Input Markets | 15 | • Behaviour of profit maximizing firms and the production process [4] | 3 |

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| **Introductory Microeconomics (ECNGE1)** **(CBCS)** | | | • Short run cost and output decisions-Basic concepts, relationships [2]<br>• Output decisions: revenue, cost and profit maximisation [2]<br>• Costs and output in the long run-short – short run conditions and long run directions [2]<br>• Long run costs [2]<br>• Economies and diseconomies of scale [2]<br>• Long run adjustments to short run conditions [1] | |
| **3rd Semester** **Course Code: ECNHC303** **Nature of the Course: Core** **Course Title: Statistical Methods for Economics** | **Unit:1** Descriptive Statistics | 15 | • Measures of Central Tendency :Arithmetic Mean, Median and Mode (for both Grouped and Ungrouped Data) [4]<br>• Properties of Arithmetic Mean[1]<br>• Comparison of Mean, Median and Mode [1]<br>• Geometric and Harmonic Mean [2]<br>• Measures of Dispersion : Range, Quartile Deviation, [1]<br>• Mean Deviation and Standard Deviation [2]<br>• Measures of Skewness and Kurtosis. [2]<br>• The Concept of Moments [2] | 3 |
| | **Unit:4** Sampling | 15 | • Distinction between sampling and census [1]<br>• Principal steps in a sample survey [1]<br>• Errors in statistics: sampling vs. non-sampling errors [2]<br>• Methods of sampling [4]<br>• Testing of hypothesis chi square [4]<br>• t test [3] | 3 |
| **3rd Semester** **(CBCS)** **Generic Elective:** **Indian Economy I** **Course Code: ECNGE3.1** | **Unit:2** Population and Human Development | | • Demographic features and trends-Size and growth rates of population, trends in birth and death rates, Density of population, Age and Sex Composition [6]<br>• Population as a factor of economic development [3]<br>• Demographic Dividend [2]<br>• National Population Policy [2]<br>• Human Development in India- Human Development indicators [3]<br>• Human Development Index, India 's human development record in global perspective [4] | 4 |

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| **5th Semester** (Major) (Non- CBCS) ECOM-503- History of Economic Thought | **Unit1: 1** Pre-classical and Classical Economic Thought | 10 | • Basic Tenants of Mercantilism and Physiocracy [3]<br>• Contributions of-<br>• Adam Smith [2]<br>• David Ricardo, T.R. Malthus [2]<br>• J.B. Say [2]<br>• J.S Mill's Restatement of Classicism [1] | 2 |
| | **Unit: 2** Reaction against Classicism: | 10 | • Positive and Critical Ideas of Historical School []<br>• State Socialism [1]<br>• Ideas of –<br>• J.K Rodbertus [1]<br>• F. Lassalle [1]<br>• Scientific Socialism [1]<br>• Chief tenants of Marxian Thought<br>• Dialectical Materialism [1]<br>• The labour theory of value [1]<br>• Theory of surplus value [1]<br>• The law of concentration of capital [1]<br>• Marx and modern economics [1] | 2 |
| | **Unit: 3** Reconstruction of Economic Science | 10 | • Subjectivism and Marginalism [1]<br>• Factors giving rise to Subjectivism and Marginalism [1]<br>• Economic Ideas of Walras and Cael Menger [2]<br>• Neo Classicism, Contributions of-<br>• Alfred Marshal<br>• Knut Wicksell [2]<br>• Bohm Bawerk [2] | 2 |
| | **Unit1: 4** Keynesian Economic Thought | 10 | • Keynes Departure from Classical Economics [1]<br>• Salient Features of General Theory of Employment. Interest and Money [2]<br>• Theory of Employment [1]<br>• Theory of Prices [1]<br>• Keynes and International Economics [2]<br>• Keynes' influence on Public Policy [1]<br>• Keynesian Economics and underdeveloped Countries [1]<br>• Keynesianism Vs. Monetarism [1] | 2 |
| | **Unit1: 5** Indian Economic Thought | 10 | • Development of Indian Economic Thought [1]<br><br>• Economic Ideas of –<br>• Kautilya [2]<br>• D. Naoroji [2] | 2 |

| | | | • M.Gandhi [2] | |
| | | | • D.R. Gasgil [2] | |
| | | | • Gyan Chand [2] | |
| **5th Semester** (Non- Major) (Non- CBCS) **Paper: 5.01** **Elementary Statistics for Economics** | **Unit: II** Measurement of Central Tendency: | 9 | • Arithmetic Mean & Geometric Mean [3] • Median [2] • Mode [2] • Comparative Merits and Demerits of Measures of Central Tendency [2] | 2 |
| | **Unit III:** Measures of Dispersion | 9 | • Range [2] • Inter-quartile Range [ 2] • Quartile Deviation [2] • Mean Deviation [1] • Standard Deviation [2] | 1 |

(Dr. Rimjim Borah)

Assistant Professor

Department of Economics
Gargaon College

# GARGAON COLLEGE
## TEACHING PLAN
### Course: B. A.
### Session: Even semester (January to June, 2021)

**Subject:** ECONOMICS

**Name of the Teacher:** DR. RIMJIM BORAH
**Methods to be applied:** Lecture, analytical and activity method, interaction and discussion.

**Teaching Materials:** Green Board, Chalk Pencil, Duster, Book, Journal, Newspaper, Magazine, Periodicals, Laptop, Projector.

| Paper Code/Title | Allotted Unit/ Topic | No. of Class required | Detail of the topics to be taught & class required | No. of tutorials |
|---|---|---|---|---|
| **2nd Semester** (CBCS) (Honours) Mathematical Methods for Economics – IIECNHC202 | **Unit: 2** Linear Algebra | 15 | • Systems of linear equations: properties of their solution [2] <br> • Matrices-elementary operations- matrix addition [2] <br> • Product [2] <br> • Rank of a matrix [2] <br> • Determinants and their properties [2] <br> • Inverse of a matrix [2] <br> • Application of Crammer's rule for solution of a system of linear equations [3] | 3 |
| | **Unit: 3** Derivations of functions of several Variable | 20 | • Derivatives of Functions of several variables: Partial and Total differentiation and economic applications [4] <br> • Indifference curve analysis; [2] <br> • Expansion Path [2] <br> • Production Function Analysis- Homogeneous Functions and Euler's Theorem; [4] <br> • Cobb-Douglas Production Function and its Properties; [4] <br> • CES Production Function and its properties [4] | 4 |

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| **2nd Semester** (CBCS) (Generic Elective) **Course Code: ECNGE2** | **Unit:2** Rules and approaches of Measurement of GDP | 15 | • Income, Expenditure, product and Value-added approaches [4]<br>• Difficulties of Estimating National Income [3]<br>• Circular Flow of Income and expenditure in two and four-sector economy [4]<br>• National income accounting for an open economy. [4] | 3 |
| **4th Semester** (Honours) **Course Title: Advanced Macroeconomics** **Nature of the Course: Core** **Course Code: ECNHC402** | **Unit: 5** Schools of Macroeconomic Thoughts | 10 | • Classicals vs Keynesians: [2]<br>• Classicals and full wage-price flexibility [2]<br>• Keynesians and wage-price rigidity [2]<br>• the Monetarist counterrevolution – the basic propositions of the monetarists[2]<br>• New-Classical economics and critique of Keynesian economics[2]<br>• Rational expectations and policy ineffective proposition; the Keynesian counter critique[2]<br>• the supply side economics – [2]<br>• Laffer curve analysis [2] | 3 |
| **4th Semester** (Honours) **Course Code: ECNHC403** **Course Title: Introductory Econometrics** **Nature of the Course: Core** | **Unit 4:** Multicollinearity | 10 | • Nature of the problem [1]<br>• Sources [3]<br>• Perfect multicollinearity vs Imperfect multicollinearity its consequences [3]<br>• Detection and remedies of multicollinearity [3] | |
| **4th Semester** (Generic Elective) | **Unit :2** Policies and Performance in Agriculture | 20 | • Changing structure of Indian Agriculture [2]<br>• Growth and productivity of Agriculture [2]<br>• Sustainable agriculture [2]<br>• concept and constraints [1]<br>• Diversification of Agriculture [2]<br>• Capital formation [1]<br>• Role of technology [1]<br>• Green revolution [2] | 2 |

| | | | • Institutions- land reforms [2]<br>• rural credit [2]<br>• agricultural marketing [1]<br>• price policy [1]<br>• WTO and Agriculture [ 1] | |
|---|---|---|---|---|
| **6th Semester**<br><br>**Paper: 6.01**<br><br>**Environmental Economics**<br><br>**ECNHDSE602** | **Unit: I**<br><br>Basic concepts | 10 | • Ecology [1]<br>• Environment and Economy [1]<br>• The Economy and Environment Linkages [1]<br>• Material Balance Model [1]<br>• Environment and development [1]<br>• Resource and Residuals [1]<br>• Environmental economics-Definition and evolution of the subject [1]<br>• Objectives and Issues [1]<br>• Environment as an economic and social asset [1]<br>• Environmental economics and Resource Economics [1] | 2 |
| | **Unit: II**<br><br>Market Failure | 10 | • Concepts and common sources of market failure [1]<br>• Public goods-characteristics [1]<br>• Environmental Quality as Public Goods [1]<br>• Optimal Provision of public goods [1]<br>• Common Property Resources [1]<br>• Externalities- Negative and Positive [1]<br>• Environmental pollution as Negative Externality [1]<br>• Internalizing Externality through Government Intervention [1]<br>• Coase theorem [2] | 3 |
| | **Unit: III**<br><br>Solution to the Environmental Problem | 10 | • The Command and Control Approach [2]<br>• The Incentive/Market based Methods [2]<br>• Emission Fee or Tax [2]<br>• Environmental Standard [1]<br>• Tradable Pollution Permit [1]<br>• Liability Law [1]<br>• Carbon Trading [1] | 3 |
| | **Unit: IV**<br><br>Sustainable Development | 10 | • Concept, Notion of Sustainability [3]<br>• Strong and Weak Sustainability [2] | 3 |

| | | | | Indicators of Sustainable development [3]<br>• Environmental Impact Assessment [2] | |
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| | **Unit: V**<br><br>Global and Local Environmental Concern | 10 | | • Environmental problems of the Developed and Developing Countries [ 2]<br>• Global Environmental problems [1]<br>• Global Warming [1]<br>• Ozone Layer depletion [1]<br>• Loss of Bio-diversity [1]<br>• Environmental problems in Assam [1]<br>• Solid Waste Management [1]<br>• Deforestation [1]<br>• Watershed Management [1] | 2 |
| **6th Semester**<br><br>**Paper: 6.01**<br><br>**(Development Economics)** | **Unit: III**<br><br>Human Resource Development and Manpower planning | 10 | | • Population Growth and Quality of life [1]<br>• Health challenges faced by the developing countries including HIV, AIDS [1]<br>• Health and Productivity [1]<br>• Health Policy for the developing countries [1]<br>• Role of Education in Economic Development, education [1]<br>• Inequality and poverty [1]<br>• Unemployment and underemployment problems of developing countries [1]<br>• Manpower Planning [1]<br>• Brain Drain [1] | 2 |

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# GARGAON COLLEGE
# TEACHING PLAN
### Course: B. A.
### Session: Odd semester, 2020

**Subject:** ECONOMICS
**Name of the Teacher:** NILUTPAL CHUTIA
**Methods to be applied:** Lecture, analytical and activity method, interaction and discussion.

| Paper Code/Title | Allotted Unit/ Topic | No. of Class required | Details of the topics to be taught & class required | No. of tutorials |
|---|---|---|---|---|
| **Mathematical Methods for Economics – I ECNHC102** **(CBCS)** | i. Preliminaries Logic and proof techniques | 8 | • Logic and proof techniques [2] • Number systems, intervals [1] • Sets: types and set operations [3] • Ordered pairs, Cartesian products, and relations [2] | 2 |
| | ii. Functions of one real variable | 10 | • Functions and their properties and graphs; [2] • Types of functions - polynomial, rational, exponential, logarithmic; [2] • Sequences and series: convergence, algebraic properties and applications; [2] • Limit of a function; [2] • Continuous functions: characterizations, properties with respect to various operations and applications [2] | 2 |
| | ii. Differential Equations | 15 | • Linear first order differential equation with constant coefficient and constant term [6] • Economic applications [9] | 2 |
| **ECNGE1 Introductory Microeconomics** | Unit V: Input Markets | 6 | • Labour and land markets - basic concepts (derived demand (1) • Productivity of an input, marginal productivity of labour (1) • Marginal revenue product); demand for labour; (1) • Input demand curves; shifts in input demand curves; (1) • competitive labour markets; | 2 |

| | | | (1)<br>• labour markets and public policy.(1) | |
|---|---|---|---|---|
| **ECNHC303: Statistical Methods for Economics (CBCS)** | Unit II: Elementary Probability Theory: | 15 | 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); Mathematical Expectation. | |
| | Random Variables and Probability Distributions: | 15 | Concept of a Random Variable, Discrete and Continuous Random Variable, Probability Mass Function, Probability Density Function, Mathematical Expectation and Its Properties. Theoretical Distributions: Binomial distribution- its properties, Poission distribution- its properties, Poission distribution as a limiting case of binomial distribution, Normal distribution-its properties. | |
| | Correlation and Regression Analysis: | 15 | Elementary analysis of linear correlation: Covariance, Scatter Diagram, Karl Pearson's coefficient of correlation– Properties and the Method of Calculation, Concept of Spearman's Rank Correlation. The Concept of Regression, Regression Lines and their Estimation in a Bivariate series, Least Squares Method, The coefficient of determination ($R^2$) and Standard Error of Estimate. | |
| **504 (M) Monetary Theories and Financial Markets (Non-CBCS)** | Unit I: Demand for money and supply of money | 4 | • Theories of demand for money and supply of money (3),<br>• Measures of money supply in India (1) | 1 |
| | Unit II: Inflation and deflation | 8 | • Inflation (2),<br>• deflation (2),<br>• stagflation (1),<br>• Phillips curve (1),<br>• stabilization policies (2) | 1 |

| | Unit III: Business cycles | 5 | • Meaning and theories of business cycles- Hawtrey (2),<br>• Keynesian (1),<br>• Schumpeter (1),<br>• Cob-web theories (1) | 1 |
|---|---|---|---|---|
| | Unit IV: Banking | 5 | • Banking- commercial banks (1), central bank (2),<br>• Rural banking (1),<br>• Non-banking financial intermediaries (1) | 1 |
| | Unit V: Financial markets | 8 | • Financial markets- Meaning, role, functions of financial markets (1), Money Market (2),<br>• Capital market (2),<br>• Indian financial markets (1),<br>• Financial reforms in India (2) | 1 |
| 501(NM) Elementary Statistics for Economics (Non-CBCS) | Unit III: Measures of dispersion | 7 | • Range, inter-quartile range (1)<br>• Quartile deviation, (2)<br>• Mean deviation, (2)<br>• Standard deviation. (2) | 1 |
| | Unit V: Interpolation | 7 | • Methods of Interpolation: Finite Difference Methods – Newton Forward, (3)<br>• Newton Gauss forward (2)<br>• Newton Gauss Backward methods (2) | 2 |

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Dept. of Economics

# Gargaon College, Simaluguri
# TEACHING PLAN
Course: B. A.
Session: Even Semester-2021

**Subject:** ECONOMICS
**Name of the Teacher:** NILUTPAL CHUTIA.
**Methods to be applied:** Lecture power point presentation, interaction and discussion.

| Paper | Allotted Unit / Topic | Class required | Detail Teaching Plan | No. of tutorials |
|---|---|---|---|---|
| **ECNHC202 Mathematical Methods for Economics–II (CBCS)** | Unit I: Difference equation: | **6** | • First order Difference equation (3)<br>• Economic Applications. (3) | 3 |
| | Unit IV: Unconstrained optimization: | **10** | • Unconstrained optimization with one variable and Economic Applications; (4)<br>• Unconstrained optimization with more than one variable and Economic Applications- (3)<br>• Discriminating Monopoly, (2)<br>• Multiproduct monopoly. (1) | 3 |
| | Unit V: Constrained optimization with equality constraints | **7** | • Constrained optimization with equality constraints: Lagrange characterization using calculus (3);<br>• Applicationsconsumer's equilibrium (2)<br>• Producer's equilibrium (2) | 3 |
| **ECNHC403 Introductory Econometrics (CBCS)** | Unit I: Nature and Scope of Econometrics | 13 | • What is Econometrics?; Economic and Econometric Models; The Aims and Methodology of Econometrics. (2)<br>• Statistical Concepts: Population vs Sample; Statistic and parameters; Estimate and estimators; estimation of parameters – point estimation vs interval estimation; properties of estimators. (3)<br>• Probability Distributions: The Normal distribution; Chi-squared, t- and F distributions. (3)<br>• Testing of hypotheses: defining statistical hypotheses; distributions of test statistics; testing hypotheses related to population parameters; Type I and Type II errors; (3)<br>• Power of a test; tests for comparing | 3 |

| | | | parameters from two samples. (2) | |
|---|---|---|---|---|
| | Unit II: Simple Linear Regression Model: | **17** | • Two variable case; Regression vs Correlation; Linearity vs Non-linearity; <br>• Stochastic specification: The significance of the error term; (2) <br>• Estimation: The Principle of ordinary least squares; (2) <br>• Assumptions under CLRM; BLUE Properties of estimators: The Gauss Markov theorem; (3) <br>• Goodness of fit – R-squared and R-bar squared; (2) <br>• Tests of hypotheses; Scaling and units of measurement; confidence intervals; Forecasting. (3) <br>• k variable linear regression model: Estimation of parameters; (2) <br>• Qualitative (dummy) independent variables – Dummy variable trap. (3) | 3 |
| | Unit V: Specification Analysis | **5** | • Omission of relevant variables; (2) <br>• Inclusion of irrelevant variables; (1) <br>• Tests of specification errors; (1) <br>• Errors in variables.(1) | 2 |
| **603(M) International Economics** | Unit I. International Economics and trade theories | **10** | • International Economics-Importance, Subject matter(1), <br>• Adam Smith's Absolute Advantage theory(1), <br>• Ricardian Law of Comparative Advantage(2), <br>• Neoclassical trade models-Opportunity cost doctrine(1), <br>• Trade and returns to scale(1), <br>• Offer curve analysis(1), <br>• Reciprocal demand(1) <br>• Heckscher –Ohlin theorem(2) | 2 |
| | Unit II. Terms of trade and gains from trade | **10** | • Terms of trade-meaning(1), <br>• Different concepts of terms of trade(2), <br>• Trade as an engine of growth(1), <br>• Distribution of gains from trade-Prebisch-Singer views on secular deterioration in the terms of trade(2), <br>• Myrdal's theory of backwash effect(2), Immiserising growth(2) | 2 |

| | | Unit III: International Trade Policy | **10** | • Free trade Vs. protective trade (1),<br>• Methods of protection - Tariff and non-tariff barriers; (2)<br>• Inward looking trade policy and outward looking trade policy and their evaluation; (1)<br>• Globalization – Meaning and essential conditions for globalization; (2)<br>• Positive and negative effects of globalization,<br>• Challenges of globalization; (1)<br>• International capital flows – Classification, significance and limitations of foreign capital,(2)<br>• Factors affecting international capital movements.(1) | 2 |
|---|---|---|---|---|---|
| | | Unit IV: Foreign Exchange Markets and Exchange Rates | **10** | • Functions of foreign exchange markets; (1)<br>• Determination of equilibrium foreign exchange rate, Concepts of spot and forward foreign exchange rates; (1)<br>• Theories of exchange rate determination – Mint parity theory; Purchasing power parity theory, Balance of payments theory; (3)<br>• Fixed and flexible exchange rate systems – Case for and against fixed and flexible exchange rate systems; (3)<br>• Balance of trade and Balance of payments; Components of balance of payments, Factors causing balance of payment disequilibrium (2) | 2 |
| | | Unit V: Evolution of International Monetary System | **10** | • Gold Standard, Inter-war period, Bretton Woods System, Regulated floating standard; (3)<br>• International Institutions: International Monetary Fund (IMF)-Objectives, functions, achievements and failures; (3)<br>• WTO – Objectives, major agreements and impacts on developing countries with special reference to India. (4) | 2 |

| 601(NM) Development Economics | Unit II: Theories of Economic Development and Economic Growth: | 9 | • Classical theory of Growth and Stagnation including Malthus's version (2),<br>• Doctrines of Balanced Growth and Unbalanced Growth, (2)<br>• Rostow's Stages of Economic Growth, (2)<br>• Myrdal's theory of Circular Causation (2)<br>• Critical evaluation of the theories (1) | 2 |

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