Curriculum

BSS (Hons) in Economics Program

Effective from Session 2016-2017

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Economics Discipline
Social Science School
Khulna University

Preamble

The developing countries are continuously struggling to attain a better standard of living for their people. Bangladesh has already passed more than four decades since her independence, but still needs to go a long way to ensure a decent standard of living for its people. To move ahead, trained economists well equipped with knowledge and ideas can best contribute to utilizing resources of the country properly. The southwestern region of Bangladesh being naturally endowed with resource base, require innovative knowledge of economists which can play an important role for its efficient utilization. The Economics Discipline of Khulna University has been trying to play a dominant role in this regard.

Khulna University, the outcome of a long-drawn movement of the people of southwestern region of Bangladesh, has launched different disciplines under different schools with the passage of time. In this chronology, Economics Discipline under Social Science School of the University started its journey in 1999 through offering a four-year Bachelor of Social Science (BSS) Honors in Economics program. In addition to this, the Discipline is currently offering an eighteen-month Master of Social Science (MSS) in Economics program and a sixteen-month Masters of Development Policy and Studies (MDPS) program with the aim of addressing the development issues of the southwestern region of Bangladesh.

The Discipline is committed to produce skilled professional economists who will be best suited to the challenging world of the new millennium. Curriculum designing and syllabus modification is an important attempt for attaining that commitment. Hence, from time to time, efforts have been made to upgrade the contents of the syllabi of the ongoing programs to enrich them with the aim of producing quality product to meet the emerging challenges of national and international economies.

Curriculum designing and modification of syllabi, no doubt, is a huge task involving merit, time, effort and money. The present version of curriculum is the result of such a combined venture through the support from the University Grants Commission (UGC) under the auspices of World Bank and the Government of the Peoples' Republic of Bangladesh. Hence, Economics Discipline of Khulna University expresses heartfelt gratitude and conveys thanks to University Grants Commission (UGC), World Bank and the Government of Peoples' Republic of Bangladesh.

1. Program Name:
Bachelor of Social Science (Hons) in Economics

2. Vision:
The vision of the program is to face the challenges and utilize the advantages of economic globalization through building up a knowledge-based economy aimed at achieving academic excellence.

3. Mission:
The mission of this program is to produce competent graduates equipped with both theoretical and research based knowledge on new and cutting-edge insights in the field of agriculture, industry, environment, money and banking, international trade and other economic issues to face the challenges and utilize the advantages of globalization for achieving sustainable development with special focus on the south-west region of Bangladesh.

4. Program Objectives:
The program is intended to produce high quality graduates who are intellectually and technically competent in building careers in various fields of economics.

The objectives of the program are to:
- Provide basic understanding of economic theory and analytical tools that can be used in economic decision making process.
- Facilitate learners' linking economic theories and practice with a view to solving real life problems and contributing to socio-economic and community development.
- Promote understanding of national and international economic problems and framing policy in the field of

agriculture, industry, environment and other economic sectors.
- Nurture stimulating academic environment through exchange and research collaboration with renowned scholars and professionals.
- Cultivate principles of ethics and social responsibility in the mindset of the students.
- Place special focus on diagnosing the economy of the south-west region of Bangladesh.
- Comply with employability needs to meet demands for high-quality graduates.

5. Learning Outcomes:

At the end of the program the students will be able to:
- Demonstrate economic concepts, theories, models and data analysis techniques to appraise Bangladesh economy with special focus on the south-west region of Bangladesh.
- Analyze the root causes and probable solutions to existing problems in the economy of Bangladesh, through applying theoretical and analytical framework of economics.
- Evaluate alternative solutions to an economic problem through using appropriate analytical framework and select the optimum one.
- Appraise current economic events from both local and global perspective.
- Identify the behavior of different economic agents and chalk out optimum practice for community and societal development.
- Make students engaged in independent learning through involvement in research and project works.
- Help developing partnership with different stakeholders to address regional development issues.

- Internalize the normative aspects and ethical values of economic decision making and actively apply those at personal and community level.
- Exercise the qualities of scholarly attainment, sense of responsibility and accountability in the familial, professional, and social environment.
- Develop skills to handle independent research and deliver effective presentations.
- Expand the frontier of acquired knowledge through further independent learning, and, thus, add to existing knowledge bank.

6. Course Structure:

Program duration : 4 Years
Number of terms : 08
Term duration : 21 Weeks
Total number of credit available : 187.5
Minimum credit to be earned : 136
Minimum credit to be earned from core courses : 111
Minimum credit to be earned from optional courses : 25

6.1 Summary of Credit Distribution:

6.1.1: Credit Distribution by Subject Area of Courses

Area of Study	Theory		Sessional/ Fieldwork		Total		Total
	Core	Optional	Core	Optional	Core	Optional	
Arts and Humanities	3	-	-	-	3	-	3
Sociology	3	-	-	-	3	-	3
Political Science	3	-	-	-	3	-	3
Business Administration	-	9	-	-	-	9	9
Information Technology	-	3	-	1.5	-	4.5	4.5
Computer Science	-	-	3	-	3	-	3
Principles of Economics	12	-	-	-	12	-	12
Mathematics/Statistics	12	3	8	2	20	5	25
Econometrics	-	6	-	4	-	10	10
Bangladesh Economy	6	-	1.5	-	7.5	-	7.5
Economics of different Sectors (agriculture, industry, institutional, region)	6	6	1.5	-	7.5	6	13.5
Demography	-	3	-	-	-	3	3
Development Issues and Planning	9	9	1.5	-	10.5	9	19.5
Poverty	-	3	-	-	-	3	3
Project Management	3	-	-	-	3	-	3
Environment, Climate Change and Disaster Management	3	6	-	-	3	6	9
Money, Trade, Finance, Globalization and International Cooperation	15	3	3	-	18	3	21
Research	3	-	7.5	-	10.5	-	10.5
Others	6	18	1	-	7	18	25
Total	**84**	**69**	**27**	**7.5**	**111**	**76.5**	**187.5**

6.1.2: Credit Distribution by Status of Courses

Year	Term	Core Courses	Optional Courses	Total Credit	Theory Courses	Sessional Courses
First	First	18.5	0.0	18.5	15.0	3.5
	Second	15.5	6.0	21.5	18.0	3.5
Second	First	15.5	9.0	24.5	21.0	3.5
	Second	17.0	6.0	23.0	18.0	5.0
Third	First	10.5	14.0	24.5	21.0	3.5
	Second	12.0	9.0	21.0	18.0	3.0
Fourth	First	8.0	17.0	25.0	21.0	4.0
	Second	14.0	15.5	29.5	21.0	8.5
Total	**Eight**	**111.0**	**76.5**	**187.5**	**153.0**	**34.5**

6.1.3: Course Distribution by Status and Number

Year	Term	Core Courses	Optional Courses	Total Courses	Theory Courses	Sessional Courses
First	First	7	0	7	5	2
	Second	6	2	8	6	2
Second	First	6	3	9	7	2
	Second	7	2	9	6	3
Third	First	4	5	9	7	2
	Second	5	3	8	6	2
Fourth	First	3	6	9	7	2
	Second	5	6	11	7	4
Total	**Eight**	**43**	**27**	**70**	**51**	**19**

6.1.4: Credit Distribution by Nature of Courses

Year	Term	Departmental		Non-departmental	
		Number	**Credit**	**Number**	**Credit**
First	First	2	6.0	5	12.5
	Second	4	10.5	4	11.0
Second	First	6	16.5	3	8.0
	Second	5	13.5	4	9.5
Third	First	7	19.5	2	5.0
	Second	8	21.0	0	0.0
Fourth	First	9	25.0	0	0.0
	Second	9	25.0	2	4.5
Total	**Eight**	**50**	**137.0**	**20**	**50.5**

6.2: Course Outline:

Term-wise course outline for the entire program is given below.

Year: First; Term: First					
Course No.	**Course Title**	**Status**	**Contact Hour**		**Credit**
			Theory	Sessional	
Econ 1101	Microeconomics I	Core	3	0	3.0
Econ 1103	Bangladesh Economy I	Core	3	0	3.0
Math 1151	Mathematics for Economists I	Core	3	0	3.0
Math 1152	Sessional on Mathematics for Economists I	Core	0	4	2.0
Eng 1153	Communicative English	Core	3	0	3.0
CSE 1154	Computer Application Lab.	Core	0	3	1.5
Soc 1155	Government and Politics	Core	3	0	3.0
Total	**Theory courses 5, Sessional courses 2 Core courses 7, Optional courses 0**		**15**	**7**	**18.5**

Year: First; Term: Second					
Course No.	**Course Title**	**Status**	**Contact Hour**		**Credit**
			Theory	Sessional	
Econ 1201	Macroeconomics I	Core	3	0	3.0
Econ 1203	Bangladesh Economy II	Core	3	0	3.0
Econ 1204	Bangladesh Economy − Fieldwork and Studio	Core	0	3	1.5
Econ 1205	Economic Geography	Optional	3	0	3.0
Stat 1251	Statistics for Economists I	Core	3	0	3.0
Stat 1252	Sessional on Statistics for Economists I	Core	0	4	2.0
BA 1253	Principles of Accounting	Optional	3	0	3.0
Soc 1255	Principles of Sociology	Core	3	0	3.0
Total	**Theory courses 6, Sessional courses 2 Core courses 6, Optional courses 2**		**18**	**7**	**21.5**

Year: Second; Term: First

Course No.	Course Title	Status	Contact Hour		Credit
			Theory	Sessional	
Econ 2101	Development Economics I	Core	3	0	3.0
Econ 2103	Urban Economics	Optional	3	0	3.0
Econ 2105	Agricultural Economics	Core	3	0	3.0
Econ 2106	Economic Activities Study − Fieldwork and Studio	Core	0	3	1.5
Econ 2107	Money and Banking	Core	3	0	3.0
Econ 2109	Poverty, Inequality and Gender Issues	Optional	3	0	3.0
Math 2151	Mathematics for Economists II	Core	3	0	3.0
Math 2152	Sessional on Mathematics for Economists II	Core	0	4	2.0
BA 2153	Management	Optional	3	0	3.0
Total	**Theory courses 7, Sessional courses 2 Core courses 6, Optional courses 3**		**21**	**7**	**24.5**

Year: Second; Term: Second

Course No.	Course Title	Status	Contact Hour		Credit
			Theory	Sessional	
Econ 2201	Development Economics II	Core	3	0	3.0
Econ 2203	Rural Development	Core	3	0	3.0
Econ 2204	Rural Development Issues − Fieldwork and Studio	Core	0	3	1.5
Econ 2205	Resource Economics	Core	3	0	3.0
Econ 2207	Patterns of Economic Development	Optional	3	0	3.0
Stat 2251	Statistics for Economists II	Core	3	0	3.0
Stat 2252	Sessional on Statistics for Economists II	Core	0	4	2.0
BA 2253	Business Communication	Optional	3	0	3.0
CSE 2254	Data Analysis and Statistical Software Lab.	Core	0	3	1.5
Total	**Theory courses 6, Sessional courses 3 Core courses 7, Optional courses 2**		**18**	**10**	**23.0**

Year: Third; Term: First					
Course No.	**Course Title**	**Status**	**Contact Hour**		**Credit**
			Theory	Sessional	
Econ 3101	Microeconomics II	Core	3	0	3.0
Econ 3103	Economic Planning	Optional	3	0	3.0
Econ 3105	Environmental Economics	Core	3	0	3.0
Econ 3107	Public Finance	Core	3	0	3.0
Econ 3108	Fiscal Management – Fieldwork and Studio	Core	0	3	1.5
Econ 3109	Population Studies	Optional	3	0	3.0
Econ 3111	Economics of South-western Bangladesh	Optional	3	0	3.0
Math 3151	Advanced Mathematics for Economists	Optional	3	0	3.0
Math 3152	Sessional on Advanced Mathematics for Economists	Optional	0	3	2.0
Total	**Theory courses 7, Sessional courses 2 Core courses 4, Optional courses 5**		**21**	**7**	**24.5**

Year: Third; Term: Second					
Course No.	**Course Title**	**Status**	**Contact Hour**		**Credit**
			Theory	Sessional	
Econ 3201	Macroeconomics II	Core	3	0	3.0
Econ 3203	History of Economic Thought	Optional	3	0	3.0
Econ 3205	Research Methodology	Core	3	0	3.0
Econ 3206	Research Methodology − Fieldwork and Studio	Core	0	3	1.5
Econ 3207	International Economics	Core	3	0	3.0
Econ 3208	Current Economic Affairs − Fieldwork and Studio	Core	0	3	1.5
Econ 3209	Financial Economics	Optional	3	0	3.0
Econ 3211	Entrepreneurship Development	Optional	3	0	3.0
Total	**Theory courses 6, Sessional courses 2 Core courses 5, Optional courses 3**		**18**	**6**	**21.0**

Year: Fourth; Term: First					
Course No.	**Course Title**	**Status**	**Contact Hour**		**Credit**
			Theory	Sessional	
Econ 4101	Applied Economics	Core	3	0	3.0
Econ 4102	Thesis Proposal	Core	0	4	2.0
Econ 4103	Econometrics I	Optional	3	0	3.0
Econ 4104	Sessional on Econometrics I	Optional	0	4	2.0
Econ 4105	Regional Economic Development	Optional	3	0	3.0
Econ 4107	Economics of Climate Change	Optional	3	0	3.0
Econ 4109	Islamic Economics	Optional	3	0	3.0
Econ 4111	Industrial Economics	Core	3	0	3.0
Econ 4113	Institutional Economics	Optional	3	0	3.0
Total	**Theory courses 7, Sessional courses 2 Core courses 3, Optional courses 6**		**21**	**8**	**25.0**

Year: Fourth; Term: Second					
Course No.	**Course Title**	**Status**	**Contact Hour**		**Credit**
			Theory	Sessional	
Econ 4201	Project Planning and Evaluation Technique	Core	3	0	3.0
Econ 4202	Thesis	Core	0	8	4.0
Econ 4203	Econometrics II	Optional	3	0	3.0
Econ 4204	Sessional on Econometrics II	Optional	0	4	2.0
Econ 4205	Transport Economics	Optional	3	0	3.0
Econ 4207	Economics of Disaster Management	Optional	3	0	3.0
Econ 4209	International Finance	Core	3	0	3.0
Econ 4211	Globalization and International Cooperation	Core	3	0	3.0
Econ 4212	Comprehensive Viva Voce	Core	0	2	1.0
URP 4251	Geographic Information System	Optional	3	0	3.0
URP 4252	Geographic Information System – Lab.	Optional	0	3	1.5
Total	**Theory courses 7, Sessional courses 4 Core courses 5, Optional courses 6**		**21**	**17**	**29.5**

6.3: Course Profile: Detailed descriptions of all individual courses are given below. Course profile includes information on course number, course title, course credit, offering year and term, course status, rationale, course objectives, Intended Learning Outcomes (ILOs) and course content.

Course No.: Econ 1101	**Credit: 3.0**	**Year: First**	**Term: First**
Course Title: Microeconomics I		**Course Status: Core**	

Rationale:
The course is designed to make the beginners oriented with the basic microeconomic tools to be used in courses at advanced level.

Course Objectives:
The aim of this course is to:
- Acquaint students with the basic tools of microeconomics.
- Help them conceptualize basic theories in this branch of economics.
- Make the students understand the link between microeconomic theory and real life practices.
- Develop skills to analyze day to day economic issues.

Intended Learning Outcomes (ILOs):
At the end of this course students will be able to:
- Gather basic knowledge regarding concepts used in microeconomics and the theories developed through using these concepts.
- Understand and analyze the nature of consumer and producer behavior.
- Demonstrate how buyers and sellers interact in the market to settle equilibrium price and quantity.
- Evaluate the determinants of production decision of the producers.
- Analyze real life happenings in the sphere of microeconomics, on the basis of acquired theoretical knowledge.

Course Content
Section – A

Introduction: Definition, nature and scope of economics; Microeconomics versus macroeconomics; Positive versus normative economics; Economic versus free good; Concept of – scarcity, choice, commodity and wealth; Basic economic activities – production, distribution, exchange, consumption; Economic system and its types – capitalistic, socialistic, mixed; Solution of basic economic problems under different economic systems; Circular flow of income; PPC / PPF.

Demand and Supply: Concept of demand and supply; Law of demand and supply; Determinants of demand and supply; Demand and supply functions, equations, schedules and curves; Movement along and shift of demand and supply curves; Various concepts of elasticity; Price, income, cross and supply elasticity; Determination of E_P; Different values of E_P; Measurement of E_S and its value.

Market Equilibrium: Derivation of market demand curve and market supply curve; Concept of market equilibrium in equation and graph; Shift of equilibrium; Consumers' and producers' surplus.

Theory of Consumer Behavior: Concept of – utility, total and marginal utility; Cardinal versus ordinal measurement of utility; Law of diminishing marginal utility; Marshallian utility analysis; Paradox of value; Indifference curve analysis; Budget constraint; Consumers' equilibrium; Change in consumers' equilibrium due to change in income and prices; PCC and ICC; Income, substitution and price effect for normal, inferior and Giffen goods.

Section – B

Theory of Production: Concept of production; Factors of production; Short-run and long-run production functions; Total, average and marginal product; Law of variable proportion; Law of diminishing return; Returns to scale; Stages of production; Iso-quant curve, Iso-cost line; Producers' equilibrium; Change in producers' equilibrium due to change in expenditure; Expansion path; Ridge line; Constrained output maximization and constrained cost minimization.

Theory of Cost and Revenue: Concept of cost; Short-run and long-run cost; Fixed and variable cost; Total, average and marginal cost; Shape of and inter-relationship between different types of cost curves; Inter-relationship between short-run and long-run cost curves; Envelope curve; Concept of – total, average and marginal revenue; Shape of and inter-relationship between different types of revenue under different market structure.

Market Structure: Definition; Classification of market on the basis of time, location and degree of competition; Characteristics of perfectly competitive and monopoly markets; Concept of firm and industry; Concept of normal and super-normal profit; Conditions of profit maximization; Determination of short-run and long-run equilibrium of firm and industry under perfectly competitive and monopoly markets; Perfect competition versus monopoly; Concept of optimum production and optimum plant.

Microeconomics in Practice: Exercise with field-level / hypothetical data on demand, supply, production and cost; Orientation to prevailing market structure of various products in surroundings.

Course No.: Econ 1103	Credit: 3.0	Year: First	Term: First
Course Title: Bangladesh Economy I		**Course Status: Core**	

Rationale:

As a student of BSS (Hons) program in Economics, one must have the knowledge of Bangladesh economy to contribute to the economy in the future, especially in policy making. During four year undergraduate program, the students have to work on various national issues. Hence, they need sound knowledge on the Bangladesh economy. The course is designed to provide appropriate knowledge about the nature, strength and weaknesses of the Bangladesh economy.

Course Objectives:

The aim of this course is to:

- Introduce the students with different sectors and issues of Bangladesh economy with their relative importance in the economic development of Bangladesh.
- Facilitate intensive study of international trade, govt. policies, and other factors associated with growth and development of Bangladesh.
- Provide idea about resources and constraints that will help students to formulate country's development strategies.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Characterize and demonstrate economic structure of Bangladesh.
- Gain knowledge on the problems and prospects of various sectors of Bangladesh economy.
- Apply their gained knowledge in formulating research problems regarding different economic issues of Bangladesh.
- Understand the national policy issues related with Bangladesh economy.
- Justify the development strategy having idea about resources and constraints.

Course Content
Section – A

Introduction: Overview of Bangladesh economy; Sectors of Bangladesh economy; Growth of GDP, GNP and NNP; Savings and investment.

Agricultural Sector of Bangladesh: Growth; Farm size and tenancy structure; Landlessness and its impact on production; Employment and income; Pricing and marketing of agro-products; Subsidy policy; Problems of agricultural development; Structural development; Seed, fertilizer and irrigation technology; Comparative analysis of agricultural and industrial sector of Bangladesh.

Industrial Sector of Bangladesh: Industrial background and growth; Structure of industrial sector and thrust sub-sectors; Labor force and employment; Role of public and private sectors in industrial development; Capital supply; Industrial policy; FDI; Decentralization.

Banking in Bangladesh: Bangladesh Bank; Commercial banks; Role in deposit mobilization; Long, medium and short term loans; Problems of banking.

Section – B

Transport and Communication: Status of transportation in Bangladesh; Road transport; Railway; Air transport; Water transport; Present status of communication in Bangladesh; Telephone, telegraph, post office.

Energy: Sources; Demand and supply; System loss; Role of PDB, DESA and REB; Rural electrification; Transmission and distribution; Role in economic development.

Natural Resources of Bangladesh: Availability, use and importance of oil, gas, coal, peat and limestone resources; Forest resources – types, sources, availability and importance of forest resources; Role in economic development; Constraints of development; Fisheries sector – sources, availability and importance; Govt. law in preservation of fish resources.

Education: Education system; Education policy; Educational institutions–mass primary, secondary, higher secondary, *madrasah*, college, technical, medical, agricultural and engineering institutions, university; Role in skill development; Govt. and NGO activities; Non-formal primary education program; Constraints in accessibility; Education versus overall economic development.

Women Development: Status of women; Constraints of women development; Concept and dimension of women empowerment; Women empowerment and pro-poor growth; Challenges of women empowerment; Initiatives for women empowerment.

Course No.: Math 1151	Credit: 3.0	Year: First	Term: First
Course Title: Mathematics for Economists I		**Course Status: Core**	

Rationale:

This course intends to familiarize students with the basic mathematical methods that are indispensable for understanding and analyzing economic issues.

Course Objectives:

The aim of this course is to:

- Make students able to interpret and use the basic mathematical tools, symbols and terminologies.
- Help students to build elementary skills in mathematical methods.
- Develop the level of students' ability to apply mathematical methods to solve problems in the area of economics.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Understand the needs of mathematics in economics and demonstrate the basic algebra and set theories, equation, function and relation and their application in economics.
- Sketch graphs of linear, quadratic, cubic, exponential and logarithmic functions.
- Understand the application of the gradient of a curve.
- Evaluate the rules of differentiation and their application in economic optimization problem.
- Apply the rules of matrix algebra and its application in economics.
- Develop skills of adopting a variety of mathematical techniques to explain economic models.

Course Content

Section – A

Introduction: Mathematical versus non-mathematical economics; Concepts of constant and parameter; Variable – endogenous, exogenous, continuous, discontinuous.

Basic Algebra: Number system; Properties of real number; Properties of zero and one; Rules of sign; Addition, subtraction, multiplication and division of signed number; Order of operation; Addition and subtraction of fractions; Rules of exponents.

Set Theory: Definition; Types of set – equal set, subset, disjoint set, finite set, infinite set, universal set; Union, intersection and complement of set; Laws of set operation.

Equation, Function and Relation: Ordered pair; Ordered set; Function; Relation; Equation; Relation versus function; Types of function and equation – constant, linear, quadratic, cubic, rational, algebraic, non-algebraic, exponential, logarithmic, polynomial; Use of equation and function in economics – demand, supply, cost, investment, national income, production, income, savings, tax and equilibrium equation.

Solution of Equation: Elimination and substitution method; Factoring; Solution of quadratic equation; Solution of equations in economics.

Graph: Graph of constant, linear, quadratic and cubic equation; Graph of inequality function; Graph of logarithmic and exponential function; Use of graph in economics.

Section – B

Elementary Geometry: Co-ordinate geometry; Distance between two points; Equation of a straight line passing through two points; Equation of two axis and their parallel lines; Condition for two straight lines to be parallel to each other and perpendicular on each other.

Differentiation: Geometrical explanation of differentiation; Rules of differentiation; Successive differentiation; Partial differentiation.

Application of Differentiation: Marginal utility; Marginal cost; Marginal revenue; Marginal profit; Marginal productivity; Profit maximization; Marginal propensity to consume; Marginal propensity to save.

Constrained Optimization: Utility maximization subject to budget constraint; Budget minimization for a given level of utility; Output maximization for a given level of cost; Cost minimization for a given level of output.

Matrix Algebra: Definition and types of matrices – square, identity, null, singular, non-singular, transpose, idempotent, inverse; Matrix addition, subtraction, multiplication; Cramer's rule of matrix solution.

Course No.: Math 1152	Credit: 2.0	Year: First	Term: First
Course Title: Sessional on Mathematics for Economists I		Course Status: Core	

Rationale:

This sessional course will be primarily based on Course No. **Math 1151: Mathematics for Economists I.** The course intends to familiarize students with the basic mathematical methods and its practical application in economics.

Course Objective:

The aim of this course is to:
- Introduce students to the mathematical concepts and methods used by professional economists.
- Develop students' ability to derive logical implications of formal economic models.
- Help students to apply mathematical methods for solving problems in the area of economics.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:
- Build up the relationship among economic variables through mathematical modeling.
- Demonstrate economic relationship between variables.
- Understand different mathematical exposition presented in the research articles.
- Develop skills for simulating economic theories for exploring the policy impacts.
- Apply the optimization techniques for exploring the optimum solutions for economic decisions.
- Apply matrix algebra for exploring the sectoral relationship of an economy.

Course Content

Application of Variable in Economics: Price; Quantity; Cost; Revenue; Profit; Consumption; Income; Savings.

Use of Equation in Economics: Demand; Supply; Cost; Investment; National income; Production; Disposable income; Savings; Tax; Market equilibrium.

Geometry and Economics: Use of geometry in economic analysis.

Differentiation and Economics: Concavity; Convexity; Maximization; Minimization.

Marginal Analysis: Marginal analysis of – cost, revenue, profit and productivity.

Course No.: Eng 1153	Credit: 3.0	Year: First	Term: First
Course Title: Communicative English		**Course Status: Core**	

Rationale:
Competence in language skills is essential for effective communication. The course offers the students an opportunity to know the skills of English language and their proper uses.

Course Objectives:
The aim of this course is to:
- Help students learn about the major skills of English language and their proper applications in everyday life.
- Develop students' communicative competence.

Intended Learning Outcomes (ILOs):
At the end of this course students will be able to:
- Apply how to transform one part of speech into another part.
- Differentiate between clauses and phrases.
- Frame W/H questions.
- Explicate the elements of reading.
- Elucidate the process of note-taking.
- Implement the notions of speaking.
- Explain the mechanics in writing.
- Place themselves as ideal listeners.

Course Content
Section – **A**

Development of Vocabulary: Processes of word formation and transformation; Proper use of parts of speech.

Sentence Structure: Structures of basic sentences; Identification of clauses and phrases; Joining sentences; Transformation of sentences; Framing W/H questions.

Reading and Understanding: Perspectives on reading comprehension; Elements of reading− vocabulary, syntax and meaning; Reading strategies− intensive and extensive reading; Scanning and skimming; Prediction and inference; Reader's expectation and interpretation; Contextual understanding and understanding the whole text; Effective note-taking.

Section – **B**

Development of Speaking Skills: Art of good speaking; Notions and functions; Speaker-listener rapport; Intonation and stress.

Development of Writing Skills: Process of writing; Understanding academic writing: features and elements; Mechanics in writing− capitalization and punctuation; Generating ideas for a writing task; Drafting and supporting ideas with evidence; Integrating data and graphics in texts; Modes of writing; Writing tasks − paragraph, essay, summary, précis, report, abstract, letter of application, assignment, examination paper.

Development of Listening Skills: Guideline for developing listening skills; Role of a good listener; Listening comprehension.

Course No.: CSE 1154	Credit: 1.5	Year: First	Term: First
Course Title: Computer Application Lab.		Course Status: Core	

Rationale:
The student must have good command over computer while studying in a university. They usually have to prepare report, project, thesis etc. by using different computer programs. Therefore, it is important to serve the very basic knowledge to the beginners about fundamentals of computer application.

Course Objectives:
The aim of this course is to:
- Make students aware about importance of e-knowledge.
- Make students capable to operate computer.
- Help students capable to operate basics of Microsoft word.
- Develop students' capability of understanding soft copy file management.

Intended Learning Outcomes (ILOs):
At the end of this course students will be able to:
- Operate computer individually.
- Manage soft copy of files in a computer systematically.
- Write reports and assignments by using MS word.
- Edit text, table and figure using tools of MS Word.
- Present descriptive statistics, produce tables and graphs using software.

Course Content

Introduction to Computer: Basic terms and concepts; Hardware, software and their applications.
Operating System Fundamentals: DOS and Windows.
Word Processing: Application and practice of MS Word Systems.
Excel: Application and practice of preliminary MS Excel Systems.

Course No.: Soc 1155	Credit: 3.0	Year: First	Term: First
Course Title: Government and Politics		**Course Status: Core**	

Rationale:

For the students of Economics, studying Government and Politics will provide insight into the political beliefs and functions which is complementary to the understanding of the modern world. The course is designed to familiarize the students with the fundamentals of government, politics and public administration.

Course Objectives:

The aim of this course is to:

- Acquaint students with the fundamental terminologies related to government and politics.
- Make the students familiar with forms and organs of government, public administration, and civil rights.
- Conceptualize existing political system of Bangladesh.
- Build knowledge of key theories and concepts, historical developments, organizations and modern issues in political science.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Understand the basic concepts of political science and the relationship between politics and economics.
- Use key theories and concepts of political science in analyzing political economy of Bangladesh.
- Understand the organs of government, electoral processes, and policies in a variety of countries around the world and the ability to compare the effectiveness or impact of differing political arrangements across countries.
- Demonstrate various activities of public administration.
- Identify and explain the central principles, institutions, procedures, and decision-making processes of Bangladesh's political system.
- Evaluate the basic strengths and weaknesses of the political system of Bangladesh through the application of political theories.

Course Content
Section – A

Introducing Government and Politics: Definition, nature and scope of political science; Government and state; Welfare state; Relationship between political science and economics.

Basic Concepts of Political Science: Political culture; Political belief; Political modernization; Political development; Political ideology; Political revolution; Political integration and constitution: comparison of the constitution between UK and USA.

State: Theories of state development; Functions of state; State and family; State and property; State and law; State and religion; State and education.

Forms and Organs of Government: Democracy; Dictatorship; Forms of government – unitary, federal, parliamentary, presidential; Legislature; Executive; Judiciary.

Section – B

Political Economies: Conservatism; Liberalism; Utilitarianism; Totalitarianism; Socialism; Capitalism; Communism.

Public Administration: Administrative structure and processes; Administrative behavior; Comparison between public and private administration; Role of public administration in economic activities; Role of the bureaucracy and the courts in policy implementation in Bangladesh.

Civil Rights and Civil Liberties: Ideas of rights; Positive and negative rights; Human rights and fundamental rights; Equity and equality; Freedom and obedience; Development of civil liberties and civil rights by judicial interpretation; Knowledge of substantive rights and liberties.

Political System of Bangladesh: National Assembly of Bangladesh; Political parties; Cabinet; Civil service and local government; Legislature, executive and judiciary; Political and military elites in Bangladesh; Constitution of Bangladesh; Problems and prospects of institutionalization of democracy in Bangladesh.

Course No.: Econ 1201	Credit: 3.0	Year: First	Term: Second
Course Title: Macroeconomics I		**Course Status: Core**	

Rationale:

The course is designed to make the beginners oriented with the basic macroeconomic tools to be used in courses at advanced level.

Course Objectives:

The aim of this course is to:

- Introduce the students with the basic concepts and tools of macroeconomics.
- Make the students conceptualize the basic theories in the branch of macroeconomics.
- Initiate understanding the link between macroeconomic theory and practice.
- Provide analytical skills to evaluate economic environment and related policy issues.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Gather basic knowledge regarding concepts used in macroeconomics and their interrelationship.
- Understand and analyze the nature of major macroeconomic variables.
- Illustrate the determinants of national income and employment.
- Explore the root causes of unemployment and inflation occurring in the economy.
- Evaluate economic environment and related policy issues.
- Analyze real life happenings in the sphere of macroeconomics on the basis of acquired theoretical knowledge.

Course Content
Section – A

Introduction: Definition; Basic macroeconomic concepts – GNP, GDP, NNP, NI, PI, DI– Interrelationship among these concepts; Nominal and Real GNP; Growth of GNP; GNP as an indicator of economic welfare; Potential and actual GNP; GNP gap; Fluctuation in GNP; Business cycle; Stabilization policy; Fiscal policy and monetary policy; Inflation; Unemployment.

National Income Accounting: Concept of – final good and intermediate good, injection into the economy and withdrawal from the economy, government expenditure, tax and transfer payment; Methods of measuring national income – product, income, expenditure and value added approach; Problem of double counting; Problems of national income accounting; Importance of national income accounting; Concept of circular flow of income and expenditure in two, three and four sector economy.

Consumption and Savings: Consumption expenditure and savings; Consumption and savings function; Concepts of – MPC, MPS, APC, APS and inter-relationship among them; Short-run and long-run consumption function.

Capital and Investment: Concept of capital and investment; Investment function; Gross and net investment; Induced and autonomous investment; Business fixed investment; Residential investment; Changes in inventories; Concepts of MEC and MEI; Investment decision; Concept of IRR and NPV.

Section – B

Classical Income Determination Model: Say's Law; Pigou's wage-price flexibility theory; Quantity theory of money – Fisher's and Cambridge versions; Output and employment determination in classical theory; Effect of changes in demand for and supply of labor on equilibrium output and employment in the classical theory; Keynesian criticism.

Keynesian Model of Income Determination: National income determination model for two, three and four sector economy; Concept of multiplier – investment multiplier, govt. expenditure multiplier, tax multiplier, transfer payment multiplier, foreign trade multiplier.

Inflation: Concept of inflation; Measurement of inflation – CPI, PPI, GNP deflator; Types and causes of inflation – cost-push, demand-pull, mixed, stagflation; Cost of inflation; Remedies for inflation; Inflationary and deflationary gap; Measurement and policies to reduce gaps.

Unemployment: Concept of – full-employment, unemployment and natural rate of unemployment; Measurement of unemployment; Types of unemployment – voluntary, involuntary, cyclical, seasonal, frictional, structural and disguised; Socioeconomic cost of unemployment; Remedies to and policies to tackle unemployment.

Course No.: Econ 1203	Credit: 3.0	Year: First	Term: Second
Course Title: Bangladesh Economy II		**Course Status: Core**	

Rationale:

This course is designed and offered to have an advanced knowledge on the economy of Bangladesh. It provides a detail analysis of the Bangladesh economy.

Course Objectives:

The aim of this course is to:

- Provide extended knowledge on Bangladesh economy.
- Analyze different microeconomic and macroeconomic variables that are interlinked with the structure of Bangladesh economy.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Demonstrate different micro and macroeconomic issues related to Bangladesh economy.
- Characterize different economic problems prevailing in Bangladesh.
- Conceptualize different international issues related with Bangladesh economy.
- Evaluate the contribution of different institutions to Bangladesh economy.
- Analyze trade policy, public-private partnership and relate these issues in different research problem setting.

Course Content
Section – A

Export and Import: Export and import items; Export income and import expenditure; Balance of trade and balance of payments; Export incentives; World economic downturn and impact on export and import.

Human Resources: Labour force characteristics; Employment by major occupation and industry; Labor market trends in Bangladesh; Formal and informal employment; Strategy for sustainable growth; Literacy and education; Skill development facilities; Manpower export – present status and future potential; Organizations involved in skill training; Major skill development training facilities; Workplace learning; Overseas employment; Prominent trades in overseas employment.

Poverty: Dimension of poverty; Rural versus urban poverty; Concept of pro-poor growth; Causes of poverty; Human Poverty Index; Poverty versus economic development; Policies and programs for poverty eradication: PRSP, MDG.

Science and Technology: Role in economic development; Role of SPARRSO, BCSIR, BSTI, BANSDOC and BCC; Information technology.

Section – B

Foreign Aid in Bangladesh: Classification of foreign aid; Importance, demerits and types of foreign aid; Methods of foreign aid; Arguments for project aid; Regional co-operation of SAARC; International co-operation; NGO assistance for development.

Budget of Bangladesh: Need for budget; Types; Difficulties in preparing budget; National budget analysis; Criticism and weaknesses of the budget of Bangladesh.

Service Sector and Development: Importance of service sector; Service sector and GDP; Contribution to employment: Regulatory framework; Corruption and irregularities in the service sector.

Public Private Partnership (PPP): Concept; Need for PPP; Different PPP implementation model; List of PPP projects and organizations involved for implementation; Legal basis for PPP in Bangladesh; Budgetary allocation for the PPP; Scope, benefits and challenges of PPP in Bangladesh.

Course No.: Econ 1204	Credit: 1.5	Year: First	Term: Second
Course Title: Bangladesh Economy − Fieldwork and Studio		**Course Status: Core**	

Rationale:

The course is offered for the students to have a field experience that develop their ability to analyze corresponding data which have an influence in their future research problem understanding. This is a hand on course that builds students' ability to analyze the real life scenario and apply theoretical understanding in analyzing real time problem analysis.

Course Objectives:

The aim of this course is to:

- Help students studying and analyzing different economic sectors, their contributions, problems, prospects and other socio-economic indicators of development.
- Enable the students to work their problems as field level study.
- Develop link between theory and practice with regard to issues of Bangladesh economy.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Design field level study on Bangladesh economy.
- Formulate and analyze research problem.
- Collect data from field for analysis.
- Analyze data corresponding to Bangladesh economy.
- Disseminate their findings through oral presentation to the academic audiences.

Course Content

The aim of this sessional course is to create awareness among the students about the current economic problems prevailing in Bangladesh. Students will review and analyze current problems and think about alternative approaches to resolve them. This course will cover, apart from other aspects, the following issues:

Industry and Development: Scenario of industrial development; Growth of industry; Problems and prospects.

Thrust Sectors: Present scenario; Problems and prospects of thrust sectors in Bangladesh.

Poverty: Real scenario analysis; Policies and programs for poverty eradication and its progress in Bangladesh.

Agricultural Development: Growth, problems and prospects of agricultural development in Bangladesh.

Education and Human Resource Development: Applicability in Bangladesh.

Energy: Present situation analysis; Challenges and opportunities in Bangladesh.

Course No.: Econ 1205	Credit: 3.0	Year: First	Term: Second
Course Title: Economic Geography		**Course Status: Optional**	

Rationale:
Economic geography has immense importance for better realization of economic problems and searching out the solutions for the global people. This course is useful to learn about the better allocation of global resources for the benefit of the human being. Students will be able to know what type of resources is available in the globe and how efficiently it can be used.

Course Objectives:
The aim of this course is to:
- Provide a conceptual base regarding the availability of economic resources of the globe.
- Make students aware of the resources and physical environment of the world.
- Develop students' knowledge about the location of secondary and tertiary economic activities.

Intended Learning Outcomes (ILOs):
At the end of this course students will be able to:
- Demonstrate key idea about the nature and scope of economic geography.
- Realize the role of human and natural resources for the benefit of human being.
- Acquaint with the physical geography of Bangladesh.
- Compare the present scenario of Bangladesh with other emerging nations of the world**.**
- Relate international trade and other macroeconomic and political issues with the geographical setting.

Course Content
Section – A

Economic Geography: Nature and scope; Necessity of studying economic geography; Studies in geography, economics, planning, business and regional perspectives; Patterns, trends and theories of the geographic arrangement and interaction of economic resources, activities and institutions; Intra-urban, interregional and international scales; Approaches to urban and regional growth in economic geography.

Natural Resources and Economic Development: Resources and the physical environment; Renewable and non-renewable natural resources; Human resources; Role of natural resources in economic development.

Population and Development: Geographic patterns in population; Location of secondary and tertiary economic activities; Demographic characteristics and population structure; Global distribution of population and its change; International migration, population growth and economic development.

Trade and Communication: Development in international goods movement and their impact on regional economic development; Development in global communication; Technology transfer.

Section – B

Economic Geography of Bangladesh: Physical geography; Natural resources; Demography; Transport and communication; Regional development scenario; Urbanization and settlement pattern – role in development; Spatial planning and development.

Economic Geography of some Selected Countries of Asia: India; Pakistan; Sri Lanka; Singapore; Hong Kong; South Korea; Taiwan; Malaysia; Indonesia and Thailand.

International Political Economy: Knowing the third world – (i) colonial encounters, (ii) the development decade, (iii) neoliberal globalization.

Course No.: Stat 1251	Credit: 3.0	Year: First	Term: Second
Course Title: Statistics for Economists I		**Course Status: Core**	

Rationale:

A basic level of understanding on statistical tools is necessary for any contemporary economists to analyze different economic phenomena. This subject provides a broad introduction to statistical concepts and techniques for data analysis. The subject is basically concerned with the development of an understanding of statistical practice and importantly its application in economics.

Course Objectives:

The aim of this course is to:

- Familiarize students with basic concepts of statistics.
- Provide knowledge and skills of using descriptive statistics in economics.
- Train up students in understanding and using correlation and index number in economics.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Understand basic concepts of statistics and their application in economics.
- Describe data by using measures of central tendency and dispersion.
- Demonstrate the shape of a distribution of data.
- Apply measures of central tendency and dispersion in analyzing economic data.
- Apply the coefficient of correlation to measure association between two quantitative variables.
- Develop index numbers to compare business or economic measurements from one period to the next.

Course Content
Section – A

Introduction: Statistics; Inductive and descriptive statistics; Population and sample; Variables: discrete and continuous; Functions; Equations; Graphs; Inequalities; Rounding of data; Notation – scientific, subscript, superscript, summation.

Frequency Distribution: Raw data; Arrays; Frequency distribution; Class intervals and class limits; Class boundaries; General rules for forming frequency distribution; Histograms; Frequency polygons; Cumulative and relative frequency distributions; Ogive; Application in economics.

Measures of Central Tendency: Arithmetic mean; Weighted arithmetic mean; Median; Mode; Empirical relation between mean, median and mode; Geometric mean; Harmonic mean; Relation between arithmetic, geometric and harmonic means; Quartiles; Deciles; Percentiles; Application in economics.

Measures of Dispersion: Dispersion or variation; Range; Mean deviation; Semi-interquartile range; Standard deviation; Charlier's check; Sheppard's correction for variance; Coefficient of variation; Standardized variable; Application in economics.

Section – B

Moments, Skewness and Kurtosis: Moments; Moments for grouped and ungrouped data; Relation between moments; Moments in dimensionless form; Population moments; Skewness; Kurtosis; Application in economics.

Correlation: Linear correlation; Measures of correlation; Coefficient of correlation; Rank correlation; Meaning and nature of multiple and partial correlation; Relationship between multiple and partial correlation; Application in economics.

Index Number: Application of index numbers; Price relatives; Quantity or volume relatives; Value relatives; Link and chain relatives; Problems involved in computation of index numbers; Use and importance of index numbers; Laspeyres' Index; Paasche's Index; Fisher's ideal index; Marshall- Edgeworth index; Cost of living index.

Course No.: Stat 1252	Credit: 2.0	Year: First	Term: Second
Course Title: Sessional on Statistics for Economists I		**Course Status: Core**	

Rationale:

Gaining practical knowledge regarding application of statistical tools is necessary for any contemporary economists to analyze different economic phenomena. This subject provides a broad scope to apply and exercise statistical concepts and techniques for data analysis.

Course Objectives:

The aim of this course is to:

- Develop skills to apply basic statistics in economics.
- Deal with real life data of economics through exercise.
- Disseminate skills for constructing index number of economic variable.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Understand the concept of data (sample and population, different types of variables, accuracy).
- Use and interpret univariate and multivariate standard descriptive statistics.
- Characterize data and their distribution.
- Apply the concepts of correlation and index number in economics.

This sessional course will be primarily based on Course No. **Stat 1251: Statistics for Economists I**, where students will learn data analysis by applying different statistical techniques. Apart from other aspects, the course will cover exercises on the following:

Collection and Tabulation of Data: Primary data; Secondary data.

Application of Statistical Data in Economics: Application of cross section data and time series data with respect to economic variables.

Central Tendency and Economics: Estimating various measures of central tendency and its relation with economics.

Dispersion and Economics: Various measures of dispersion; Coefficient of variation and its applicability in economics.

Correlation and Economics: Relationship between economic variables; Calculation and interpretation of correlation coefficient.

Index Number and Economics: Various index numbers; Inflation; Share market.

Course No.: BA 1253	Credit: 3.0	Year: First	Term: Second
Course Title: Principles of Accounting		Course Status: Optional	

Rationale:

This course will provide the students with basic understanding of the principles and concepts of accounting as well as their applicability and relevance in the practical context.

Course Objectives:

The aim of this course is to:

- Train up students to record, handle and summarize accounting data.
- Endow students in preparing financial statements for service and merchandising operations.
- Provide thorough grounding and the technical skills of accounting necessary to work as an accountant more efficiently and effectively.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Define accounting, objectives of accounting; explain double entry accounting system-journal-ledger-trial balance.
- State and analyze adjusting entries, types of adjustment, and reasons of adjustments.
- Describe reasons of worksheet preparation, worksheet problem exercise of Service Company and reversing entries.
- Analyze and develop income statement, balance sheet, correction of errors.
- Narrate purchase journal, sales journal, cash book, bank reconciliation statement.
- Compare and evaluate various types of share, insurance shares, inventory and methods of inventory calculation.

Course Content
Section – A

Introduction: Concept of accounting; Objectives of accounting; Branches of accounting; Accounting equation; Users of accounting information; Accounting cycle: Concept; Steps in accounting cycle; Concept of account; Types of account; Double entry accounting system; Journal; Ledger; Trial balance.

Adjusting the Accounts: Concept of adjustments; Types of adjustment; Reasons of adjustments; Adjusting entries.

Completing the Accounting Cycle: Worksheet, Steps in preparing a worksheet; Preparing financial statements from a worksheet; Preparing adjusting entries from a worksheet; Preparing closing entries; Posting closing entries; Preparing a post; Closing trial balance; Reversing entries.

Account of Merchandising Company: Income statement; Balance sheet; Correction of errors.

Section – B

Special Journals: Purchase journal; Sales journal; Cash book; Bank reconciliation statement.

Accounting of Plant Assets: Concepts and nature of plant assets; Depreciation; Factors affecting depreciation; Methods of depreciation.

Company Accounting: Concepts; Types of shares; Issuance of shares.

Inventory Accounting: Concept of inventory; Types of inventory; Methods of inventory calculation.

Course No.: Soc 1255	Credit: 3.0	Year: First	Term: Second
Course Title: Principles of Sociology		Course Status: Core	

Rationale:
This course is designed to introduce students with basic concepts of Sociology. It also deals with how society operates and how individuals act on it.

Course Objectives:
The aim of this course is to:
- Introduce the role of social factors in socio-economic development of a country.
- Provide knowledge about the fundamentals of Sociology like society, community, institutions, culture, civilization, crime, and other social problems.
- Make students understand the influence and role of social elements on society and on development.

Intended Learning Outcomes (ILOs):
At the end of this course students will be able to:
- Apply basic concepts of Sociology to interpret social institutions' work.
- Analyze how culture, civilization and mode of production influence the society.
- Comprehend the relationship between social structure and culture.
- Demonstrate the process of socialization and social structure.
- Diagnose the responsible factors of social stratification and resulted inequalities.
- Evaluate different social problems and rural-urban differentials with regard to social life.

Course Content
Section – A

Introducing Sociology: Definition, nature and scope of Sociology; Origin and development of Sociology; Theoretical perspectives of Sociology; Research methods in Sociology.

Basics Concepts of Sociology: Society; Community; Association; Institution; Group.

Major Institutions: Marriage; Family; Kinship; Property; Division of labor; Religion; Education; Mass media; Government and state.

Culture and Civilization: Definition, types and elements of culture; Custom; Folkways and Mores; Cultural dominancy and sub-culture; Cultural diffusion; Theory of cultural lag; Culture and civilization; Socioeconomic change through culture.

Socialization and Social Structure: Meaning, types and agents of socialization; Theoretical understanding of socialization; Definition and elements of social structure; Marxist and non-Marxist views of social structure.

Section – B

Types of Society and Mode of Production: Hunting, gathering, pastoral, agrarian and industrial societies; Primitive communism; Slavery; Feudalism; Capitalism; Socialism; Communism; Works and economic life.

Stratification and Inequality: Social stratification and differentiation; Social inequality; Types and theories of social stratification; Definition and types of social mobility.

Deviance, Crime and Social Control: Definition and theories of deviance; Crime and justice system; Social control and its agencies.

Social Process and Social Change: Adaptation, assimilation and accommodation; Meaning, factors and theories of social change; Evolution, progress and development; Theories of social change – modernization, dependency and globalization.

Social Problems in Urban and Rural Areas: Unemployment; Poverty; Corruption; Crime; Beggary; Vagrancy.

Course No.: Econ 2101	Credit: 3.0	Year: Second	Term: First
Course Title: Development Economics I		**Course Status: Core**	

Rationale:

This course is designed to acquaint students with the fundamental concepts and issues of development theories and approaches.

Course Objectives:

The aim of this course is to:

- Facilitate students conceptualizing the meaning and implication of development.
- Make students understand cotemporary approaches to development.
- Acquaint students with different theories and perspectives of development.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Inculcate the real meaning of development.
- Demonstrate the agents and factors that affect development.
- Realize theoretical underpinning of different approaches and theories of development.
- Compare stages of development experienced by Bangladesh with other countries.
- Judge the relevance of the theories from Bangladesh perspective.
- Use development theories in decision making process.

Course Content
Section – A

Meaning and Measurement of Economic Development: Concept of development and growth; Core values of development; Traditional and new approaches to development; Classification and characteristics of developed, underdeveloped, developing countries; Economic and non-economic factors of development.

Historical Events in Progress towards Development: Evolution of capitalism and the demise of feudalism; Post World War II; Decolonization; Post cold war.

Approaches to Development: Endogenous growth approach, exogenous growth approach; Top down/Trickle down approach; Growth pole approach; Bottom up/Grass roots development; Participatory approach to development; Regional development; Export led growth; Import substitution; Foreign direct investment; Local Economic Development (LED); Green revolution and agricultural modernization; Basic need approach; Green growth.

Endogenous Growth and Technological Change: Meaning; Patterns of endogenous growth; Role of technological change in economic development; Capital intensity of techniques in developing countries; Conflict between employment and output and employment and saving in the choice of technique; Aggregative implications of factor substitution.

Section – B

Role of Foreign Aid and Foreign Direct Investment: Role, necessity and impact of foreign aid in economic development; Two-gap model of investment; External debt; Foreign direct investment and its impact on economy.

Development Gap and Measurement of Poverty: Development gap and income distribution in the world economy; Measurement and comparability of per capita income as an index of development; Measuring poverty; Tackling poverty; Human poverty index and human development index; Economic, social and psychological factors behind poverty; Kuznets' hypothesis regarding relation between income distribution and GNP.

Classical Theories of Development: Rostow's stages of economic growth; Adam Smith's theory; Ricardian theory; Mill's theory.

Neo-Classical Theories: Marxian theory; Schumpeterian theory; Keynesian theory.

Dual Sector Models: Fei-Ranis model; Lewis Model.

Course No.: Econ 2103	Credit: 3.0	Year: Second	Term: First
Course Title: Urban Economics		Course Status: Optional	

Rationale:

Students will be able to focus on the spatial distribution of different economic activities through this course. It will help students to identify problems generated from different land-use and find out probable solutions.

Course Objectives:

The aim of this course is to:
- Acquaint with the main economic forces that generate cities and also influence regional agglomeration.
- Focus how the growth of cities influences economic and social life of city dwellers.
- Illustrate how planning assures optimum land-use.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:
- Search out economic forces that explain why cities exist.
- Explain why firms agglomerate.
- Describe location equilibrium and analyze how they change.
- Identify factors causing urban sprawl and reasons for poverty concentration in urban areas.
- Find out different ways of measuring economic growth in urban area and how these measures represent benefits to various groups.
- Evaluate different government policies for urban economic development.

Course Content
Section – A

Introduction: Definition, nature, scope, importance; Necessity of studying urban economics as a separate study; Distinctions between urban and rural development.

Economics of Urban Area and Urbanization: Nature of urban area; Market forces in the development of cities; Basic versus non-basic activities; Economic base theory; City stage.

Location of Economic Activities: Reasons for development of cities; Factors of location choice; Transfer oriented industrial firms; Market oriented industrial firms; Intermediate location; Transshipment points and port cities; Location choice of firms and development of cities.

Urban Public Centre in National Economic Development: Definition and categories of centers; Basic principles of Christaller's central place theory; Functional classification of markets; Growth center and importance in the national economy; Hierarchy of urban centers; Indicators of central functions of Bangladesh urban centers.

Urban Planning: Concept of urban planning; Significance of planning in urban development; Instruments of urban planning; Properties of good urban planning; Characteristics of a planned urban area.

Section – B

Urban Land Market and Land Use Framework: Market value of land; Determinants of land rent; Ricardian approach; Competition and land rent; Land rent and public policy; Von Thiner model; Income related framework; Park-Burgess model.

Rural Urban Migration: Definition; Causes of migration – push and pull factors; Theories of migration – E.C. Young and W.T. Reilly's gravity model, Samel Stonfter's intervening opportunity model, Todaro's migration model; Consequence of migration.

Growth of Slums: Housing sub-systems of the urban poor; Causes of slum formation; Slum environment; Social life of slum dwellers – health, education, occupation, income and provision of basic services; Definition of urban sprawl; Costs and benefits of sprawl.

Urban Informal Sector: Definition; Causes of growth; Impact on employment; Role in urban economy; Impact on physical environment; Management; Development and promotion of informal sector.

Urban Problems of Bangladesh: Main reasons for Dhaka based development; How this concentration making problems in balanced development?; How this situation can be changed?

Course No.: Econ 2105	Credit: 3.0	Year: Second	Term: First
Course Title: Agricultural Economics		**Course Status: Core**	

Rationale:
This course provides a basic understanding of the nature, function and structure of agricultural markets, including the economics of commodity markets and of market failure, the role of international trade policy, and how governmental policy creates impact on producers in Bangladesh.

Course Objectives:
The aim of this course is to:
- Introduce the students with agricultural productivity, optimization in agricultural production along with neoclassical theories.
- Provide fundamental knowledge regarding agricultural activities, practices, land tenancy acts, association with rural development and its overall scenario in Bangladesh.
- Identify problems associated with various areas of agriculture and suggest options to solve those problems.

Intended Learning Outcomes (ILOs):
At the end of this course students will be able to:
- Understand the relevance of the economic principles of scarcity, choice, trade-off, opportunity cost, efficiency, price and price signals, economic systems with the agricultural production and trading.
- Apply basic economic concepts to predict changes in product prices and quantities in the agro-product markets in the mixed economic system.
- Demonstrate cost theory, markets, market structures, market power.
- Conceptualize the market failure concept and be familiarized with the concept of role of government policy to correct it.
- Analyze the impact of the changes in government regulations, taxes, consumer preferences and technology on agricultural production, commodity markets and resource allocation.
- Assess the implications of disguised unemployment in agriculture, agricultural financing and land tenancy.

Course Content
Section – A
Introduction: Definition, nature, scope, importance and necessity of studying agricultural economics; Land in agriculture; Characteristics of land; Peculiarities of agricultural economics; Economic definitions of peasants, family, household.
Economics of Agricultural Production: Factor-product relationship; Concept of – total, average and marginal products; Increasing, decreasing and negative returns; Optimization in factor-product relationship; Marginal products; Factor-factor relationship; Concept of iso-quant and iso-cost curves; Optimum factor combination; Product-product relationship; Concept of production possibility and iso-revenue curves; Optimization problem; Determinants of demand for and supply of agricultural product; Price and income elasticity of demand for agricultural product.
Neoclassical Theory of Farm Production: Farm decision-making; Production function; Substitution between inputs; Enterprise choice; Constrained production.
Agricultural Marketing: Marketing functions and market structure; Major market imperfections in developing countries; Agricultural marketing in LDCs; Reforms; Transaction cost and its types; Role of transaction cost in supply response for peasant households.

Section – B

Agricultural Finance in Developing Countries: Need for capital and credit in agriculture; Sources of capital and credit; Nature and role of rural money market; Impact of informal credit system on agriculture; Indebtedness and rural poverty in Bangladesh; Micro-credit by NGOs and its role in agricultural development.

Land Tenure System and Land Reform: Types of land tenure system; Land tenure system in Bangladesh; Permanent settlement act; Merits and demerits of permanent settlement act; Meaning of land reform and importance; Land reform in Bangladesh – EBSATA 1950, reforms of 1972 and 1984; Land rental markets – share-cropping, fixed-rent contracts; Incentive effects (Marshallian inefficiency); Risk effects; Land size and productivity; Land sales.

Labor Market: Types of labor –casual, permanent; Features of casual and permanent labor; Standard demand-supply approach.

Farm Size and Productivity: Types of farm – large, middle, small, subsistence, commercial, specialized, diversified, private, cooperative and collective; Farm size-productivity relationship; A.K. Sen's hypothesis.

Agricultural Development Problems: Characteristics of Bangladesh agriculture; Problems of development; Problems of unemployment; Mechanization.

Course No.: Econ 2106	Credit: 1.5	Year: Second	Term: First
Course Title: Economic Activities Study - Fieldwork and Studio		**Course Status: Core**	

Rationale:

This course is designed to teach students about how to design a field level research plan on economic activities. The purpose of this course is to describe and analyze economic activity and to explore how a researcher proceeds with his/her plan through implementing a step by step theoretical plan.

Course Objectives:

The aim of this course is to:

- Provide the concepts of economic activities to have field level experience for interpreting characteristics of economic activities around them.
- Build up capacity to identify problems in local level economic activities and chalk out their respective solutions.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Undertake a self-administered research for writing a report.
- Handle data of the real world economic activities and analyze them with statistical tools and draw conclusions.
- Follow sequential steps for analyzing an economic activity.
- Prepare a well-organized report.

Course Content

The students will be introduced with the concepts of economic activity through this course. They will be sent to the field either individually or in groups to study the daily economic activities going around us, like,

A Local Bazaar – Location characteristics, items sold, sources of supply, approximate daily turnover form the view point of seller and buyer.

A Self-employed Person (like a retail shop-keeper) – Items sold, sources of supply, daily turnover, cost of running business, personal/family expenditure, net income from business and other sources.

Petty Service-holders in Different Government/Non-government Institutions – Salary, other sources of income, expenditure, possession of wealth, status of living.

The students will submit brief reports on their findings with necessary statistics and interpretation of data.

Course No.: Econ 2107	Credit: 3.0	Year: Second	Term: First
Course Title: Money and Banking		**Course Status: Core**	

Rationale:

This course uses an economic framework to discuss the structure of financial markets, financial institutions, and monetary policy.

Course Objectives:

The aim of this course is to:

- Offer fundamentals of modern monetary economics, monetary policy, and explanation of inflation.
- Enable the students to understand how the monetary policy works under different economic conditions.
- Link among monetary policy, money, inflation, trade etc.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Demonstrate the relationship between financial markets, financial instruments, and financial intermediaries.
- Conceptualize the theory of rational expectations and the efficient markets hypothesis.
- Diagnose the structure of and degree of competition within the banking industry, as well as the trend toward deregulation of the financial markets.
- Appraise the functions of a central bank and describe the main tools and goals of monetary policy.
- Evaluate the management of government debt.
- Identify the components of the money supply and the targeting strategies of the central bank to impact on aggregate economic performance through changing money supply.

Course Content
Section – A

Money and Interest: Definition of money; Functions of money; Types of money–commodity standard, fiat standard, deposit money, near money; Credit and money; Meaning and types of interest; Theories of interest; Relationship between interest rate and investment; Relationship between interest and return.

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Quantity Theory of Money: Transaction velocity approach; Cash balance approach; Income version of Cambridge equation; Criticism of traditional quantity theory.

Monetary Policy: Definition; Functions of monetary policy; Role of monetary policy in stabilizing money market; Multiple deposit creation and money supply process; Determinants of money supply; Tools of monetary policy.

Money Market: Components of money market and its role in the economy; Difference between money and capital market; Problems of money market in Bangladesh.

Financial Markets: Overview of financial markets; Types; Money versus capital market; Primary versus secondary markets; Role of financial institutions in financial markets; Government intervention in financial market.

Section – B

Banking: Definition of banking; Definition of a customer; Banker-customer relationship; Obligation of a banker; Type of accounts; Precaution to be taken while making payment of cheques; Refusal of cheques.

Central Bank: Definition, role and functions in the economy; Role of central bank in maintaining internal and external monetary balance; Bangladesh Bank and its functions.

Commercial Banking: Definition, role and functions; Balance sheet of a commercial bank; Portfolio management of commercial banks; Currency drain; Excess reserves; Non-personal time deposits; Monetary base; Money multiplier; Concept of deposit creation.

Islamic Banking: Nature and significance; Functions of Islamic banking; Main difference between conventional banking and Islamic banking.

Development Banking: Problems of formation and operation of development banks; Roles and functions of World Bank, Asian Development Bank and Islamic Development Bank.

Course No.: Econ 2109	Credit: 3.0	Year: Second	Term: First
Course Title: Poverty, Inequality and Gender Issues		**Course Status: Optional**	

Rationale:

This course will make students able to conceptualize and analyze the issues of poverty and inequality and the gender differences in various aspects of welfare and economic life.

Course Objectives:

The aim of this course is to:

- Provide a self-contained introduction about poverty and inequality.
- Make them aware about dimensions and types of poverty and inequality.
- Develop students' skill regarding construction of various methods and measures of poverty and inequality.
- Introduce the causes and effects of gender inequality in education, labor force participation, earnings and intra-household resource allocation.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Demonstrate the key ideas about poverty and inequality.
- Conceptualize different measures of poverty and inequality.
- Analyze the causes and consequences of poverty and inequality.
- Diagnose the key issues, goals and targets set in Poverty Reduction Strategy Papers, Millennium Development Goals and Sustainable Development Goals.
- Apply different methods and measures in estimating poverty and inequality of a rural or an urban area and also measure the gender differences of those aspects

Course Content
Section – A

Introduction: Concept of poverty; Classification of poverty; Poverty lines; Concept of inequality; Poverty versus inequality; Inequality in income, asset and other human rights.

Approaches to Defining Poverty: Monetary income; Capability approach; Social exclusion; Participatory approach; Problems of interpreting the approaches.

Poverty Measurement and Analysis: Dimensions of poverty; Two issues in generating poverty estimates – poverty lines (identification) and poverty measures (aggregation); Methods of fixing poverty lines – cost of basic needs method (both cost of basic food and non-food need); Food energy method; Measures of poverty – incidence of poverty, depth of poverty, poverty gap, poverty severity; Poverty analysis – income or consumption poverty profile; Qualitative analysis of poverty.

Poverty and Wellbeing: Conceptualizing human wellbeing – adopting capability approach; New definition of wellbeing; Ecological, physical, material and moral model of wellbeing; Relationship between objective and subjective measures of wellbeing.

Gender Differences: Gender-disaggregated vs. gender-sensitive indicators, Household versus individual indicators, UNDPs gender-related indices, Women and poverty in Bangladesh.

Gender and Development: Integration of women in development; Women empowerment approaches - WID, WAD, GAD; Gender Policy - CEDAW, BEIJING+5, ICPD; Women's development policy in Bangladesh.

Section – B

Concept of Inequality: Definition of inequality; Issues on inequality; Dimensions of inequality; Why does inequality matter?; Methods of measuring inequality – range, range ratio, Mcloone index, coefficient of variation, Gini-coefficient, Theil's T statistics.

Types of Inequality: Vertical inequality; Horizontal inequality – importance of horizontal inequality, dimensions of horizontal inequality, conflicts and horizontal inequality, examples of major horizontal inequalities, policy implications for reducing horizontal inequality; Relationship between horizontal and vertical inequality; Categories of socioeconomic policies.

Poverty, Inequality and Development: Economic characteristics of poverty groups – rural poverty, women and poverty, ethnic minority and poverty; Why is inequality a problem?; Kuznets' inverted U hypothesis; Relationship between growth and inequality; Political economy channels; Capital market imperfections; Social conflict channels; Relationship between growth and poverty; Policy options for addressing poverty.

Poverty Reduction in Bangladesh: Extent of poverty in urban and rural areas in Bangladesh; Problem of rising inequality; Political economy of combating rural poverty; Poverty reduction and inclusive development; Inclusive development, governance reforms and poverty reduction.

Gender Bias: Distortion imposed by gender bias in education-Levels and trends of gender gaps in education, modeling causes and consequences, empirical approaches to analyze causes and consequences; Gender bias in employment-causes, the feminization U hypothesis, gender gaps in employment and pay; Differences in health needs, health access and health outcomes by gender, missing woman problem, the Oster controversy.

Course No.: Math 2151	Credit: 3.0	Year: Second	Term: First
Course Title: Mathematics for Economists II		**Course Status: Core**	

Rationale:

This course will introduce the major mathematical tools that are used in modern economics. The course covers advanced approaches of linear algebra, multivariable calculus, general optimization problem of function of several variables both without restrictions and with restrictions formed by equalities and inequalities, differential and difference equation and their application in economic analysis.

Course Objectives:

The aim of this course is to:

- Review the uses of mathematics and its application in economics.
- Develop an initial understanding of how to frame economic ideas in mathematical format.
- Familiarize students with the mathematical tools and make them able to use these tools in formalizing and solving problems in the context of economics.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Demonstrate a sound knowledge and understanding of the application of various concepts of basic mathematical tools.
- Apply different fundamental mathematical tools in economics and finance.
- Use the techniques of multivariable unconstrained and constrained optimization, comparative statics, and dynamic economic models.
- Apply the advanced matrix algebra including linear transformations, Eigen values and Eigen vectors of a matrix, bordered hessian and so on.
- Understand the general and dual problem in linear programming and its application in game theory.
- Use mathematical notation, terminology and techniques of the differential, and difference calculus to economic applications.

Course Content
Section – A

Introduction: Use of mathematics in economics – market equilibrium; National income determination; Constrained optimization.

Progression: Sum of arithmetic and geometric progression; Taylor series; Application in economics.

Integration: Concept of integration – indefinite integral, definite integral; Rules of integration; Area between curves; Integration in business decisions; Application of definite and indefinite integral – marginal function to total function; Consumers' surplus.

Mathematics and Finance: Problems of rate of growth; Compound interest; Economic interpretation of some applications; Compounding period; Future value of a series of payment; Number of period; Periodic payment on principle; Amortization table; Interest rate; Discount; Present value of a series of future payment; Benefit-cost ratio; Internal rate of return.

Section – B

Advanced Matrix Algebra: Eigen values and Eigen vectors problem; Quadratic forms; Positive definite matrices; Maxima and minima in matrix terms; Constrained extreme; Differential calculus and matrix notation; Matrix solution – unique, multiple and no solution.

Differential Equation: Definition and classification; Concept of – order, power, linearity and homogeneity of differential equation; Equation of the first order and first degree; Exact equation; Separable variable; Homogenous and non-homogeneous equation; Equation reducible to homogeneous form; Linear equation with constant/variable coefficient and term; Dynamics of market price; Time path; Dynamic stability of equilibrium; Higher order differential equation; Interaction of inflation and unemployment – a market model with price expectation.

Difference Equation: Definition and concepts; General solution of first order linear difference equation; Second order difference equation; Dynamic stability of equilibrium; Convergence to equilibrium; Cobweb model – market model with inventory; Lagged income determination model.

Course No.: Math 2152	Credit: 2.0	Year: Second	Term: First
Course Title: Sessional on Mathematics for Economists II		**Course Status: Core**	

Rationale:
This sessional course is primarily based on "**Math 2151: Mathematics for Economists II**". The course intends to introduce students with advanced mathematical methods and their applications which are drawn from a wide range of fields in economics including microeconomics, macroeconomics, and finance.

Course Objectives:
The aim of this course is to:
- Introduce students to the mathematical concepts and methods used by professional economists.
- Equip students with the necessary knowledge to express economic ideas with formal mathematical concepts.
- Develop students' ability to derive logical implications of formal economic models.

Intended Learning Outcomes (ILOs):
At the end of this course students will be able to:
- Identify and demonstrate the knowledge and understanding of the mathematical concepts and methods used by professional economists.
- Apply different fundamental mathematical tools in economics and finance.
- Use advanced matrix algebra in economics.
- Understand and use the mathematical notation, terminology and techniques of the differential, and difference calculus to economic applications.
- Critically analyze and evaluate economic models by using formal mathematical methods.

Course Content
Progression and Economics: Application of progression in economics.
Integration and Economics: Use of integration in economics.
Exponential and Logarithmic Function: Use of exponential and logarithmic function in economics.
Matrix Algebra: Matrices and its use in economics.
Difference and Differential Equation: Use of difference and differential equation in economics.

Course No.: BA 2153	Credit: 3.0	Year: Second	Term: First
Course Title: Management		**Course Status: Optional**	

Rationale:

This course is designed to discuss management theories, functions, concepts, techniques, and practices in the context of complex, dynamic, changing and globalizing business world.

Course Objectives:

The aim of this course is to:
- Provide knowledge of key principles of management and able to critically apply this knowledge to the analysis of a complex case study.
- Make students acquainted to apply selected management topic to a real organizational setting.
- Endow students with a strong practical focus and covering latest research studies in the field of management.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:
- Define management, explain management process, discuss managerial roles, managerial skills.
- Understand importance of theory and history, the classical management perspective, the classical management perspective today, the behavioral management perspective today.
- Explain management planning & decision making, steps of planning process, rational decisional process.
- Narrate motivation, explain Maslow's hierarchy of needs, ERG theory, Two-factor theory, theory of individual human needs, Equity theory, Reinforcement theory, Goal-setting theory, McClelland's theory of need.
- Conceptualize leadership, discuss leadership theory-Michigan studies, Ohio state studies; situational approaches to leadership-LPC theory, Path-goal theory with their comparison and application.
- Define controlling, types of control; describe steps in control process with application in business.

Course Content
Section – A

Introduction: Definition, scope, purpose and function of management; Management process; Characteristics of a good manager; Basic managerial roles and skills; Environment of organization and manager: Internal and external environment; Culture and multicultural environment.

Management Theory and Thought: Importance of theory and history; Precursors to management theory; Management in antiquity; Early management pioneers; Classical management perspective; Behavioral management perspective; Quantitative management perspective; Integrating perspective; Contemporary management issues and challenges.

Management Planning: Purposes and goals; Planning process; Organizational plans; Strategic, tactical and operational planning; Managing goal – setting and planning process; Types of strategic alternatives; Barriers of goal setting and planning process; Overcoming the barriers.

Organizing: Basic elements of organizing; Designing jobs; Grouping jobs; Departmentalization; Establishing reporting relationships; Chain of command; Span of control; Distributing authority– delegation process, decentralization and centralization; Coordinating activities; Need for coordination; Line and staff authority.

Section – B
Staffing: Nature of staffing function; Human resource planning; System approach to planning; Recruitment – selection, promote or hire; Manager selection; Training; Management development programs– on-the-job and off-the-job methods, promotion, transfer, demotion.
Motivation: Importance of motivation in the workplace; Historical perspectives on motivation; Maslow's hierarchy of needs; ERG theory; Two-factor theory; Theory of individual human needs; Equity theory; Popular motivational strategies: empowerment and participation; New forms of working arrangement.
Leadership: Meaning of leadership; Leadership vs. management; Power and leadership; Leadership behaviors: Michigan studies, Ohio State studies; LPC theory and Path-Goal theory; Substitutes for leadership; Charismatic leadership; Transformational leadership.
Controlling: Meaning and purpose of control; Types of control; Steps in control process; Operational, financial, structural and strategic control; Characteristics of effective control; Resistance to control; Overcoming resistance to control.

Course No.: Econ 2201	Credit: 3.0	Year: Second	Term: Second
Course Title: Development Economics II		**Course Status: Core**	

Rationale:

This course is designed to confer a comprehensive idea regarding development issues, concepts and theories so that students can think and analyze the growth process and development pattern of both developed and developing countries.

Course Objectives:

The aim of this course is to:

- Introduce students with a wide range of development theories, both classical and neoclassical perspectives and theories of growth in an advanced way.
- Acquaint students with the factors of growth and different growth strategies.
- Introduce students with the idea of political economy of development and governmental policies that affect development.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Diagnose the economic growth and contemporary global development issues.
- Demonstrate growth strategies followed by today's developing world.
- Analyze the application and relevance of growth theories in real life economic decision making.
- Explore the underlying causes of economic disparity and inequality between first world and the third world.
- Evaluate the development-oriented strategies so far undertaken by Bangladesh government.
- Assess the effectiveness of poverty reduction strategies in Bangladesh.

Course Content
Section – A

Factors of Growth: Population and development-optimists theory; Pessimist theory; Neutralist theory; Microeconomic household theory of fertility; Demand for children in developing countries; Human capital formation and its role in development in LDCs; Unemployment – dimension of unemployment problem, jobless growth and output employment lag; Economic models of employment determination – free market classical model, output and employment growth model, price incentive model, Harris-Todaro migration and unemployment model.

Political Economy of Development: Definition, scope of political economy; Perspectives of political economy – classical political economy, Marxian political economy, neo-classical political economy; Role and influence of political economy in development process; Various determinants of political economy and their inter-dependence.

Economics of Growth: Capital accumulation; Sources of capital formation and its necessity; Population and labor force growth – impact of changes of capital and labor on PPC; Monetary and fiscal policy for optimal development; Investment patterns in LDCs; Effectiveness of investments in some selected countries of the world; Neutral and non-neutral technological change; Disembodied and embodied technical change; Labor saving and capital saving technological progress; Labor augmenting and capital augmenting technological progress; The historic record – Kuznets' six characteristics of modern economic growth; Limited value of the historic growth experience: differing initial conditions.

Theories of Growth: Harrod-Domar model; Kaldor model of distribution.

Section – B

Theories of Balanced and Unbalanced Growth: Rosenstein Rodan's big push theory; Leibenstein's critical minimum effort theory; Nelson's low level equilibrium trap theory; Hirschman's unbalanced growth theory.

Inclusive Growth Strategy: Meaning and dimension; Pillars of inclusive growth; Development challenge and situational analysis; Rural infrastructure and inclusive development; Trade and inclusive growth – factors, experiences, adjustments and policy making.

Liberalization and Deregulation: Optimal market structure for development; Role of government in facilitation of trade; Trade liberalization; Regulation and deregulation of government policies.

Current Issues in Economic Development: Millennium development goal; Poverty reduction strategy paper; Special programs of the government – Social Safety Net (SSN) programs.

Course No.: Econ 2203	Credit: 3.0	Year: Second	Term: Second
Course Title: Rural Development		**Course Status: Core**	

Rationale:

A student of Economics must have the knowledge of linkage between rural and urban areas. No development effort can see light if it is not backed by rural development. That is why; this course is offered for better understanding of rural problems and potentialities thereof.

Course Objectives:

The aim of this course is to:

- Provide better understanding of rural development issues.
- Enable students for understanding about concurrent rural problems, past efforts and present status.
- Make students able to apply their gained knowledge in rural development policy issues.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Analyze rural development-oriented projects and programs.
- Demonstrate the dimensions of rural development in order to identify and analyze problems in this respect.
- Investigate the aspect of rural-urban interaction in the context of rural development.
- Understand the process of technology diffusion and transformation of rural development.
- Analyze effectiveness of existing rural development policies and programs.
- Design appropriate rural development policies, strategies and programs.

Course Content
Section – A

Introduction and Problems of Rural Development: Meaning and importance; Low agricultural productivity; Causes and consequences; Landlessness and its causes; Rural poverty – types, causes and solutions to eradicate.

Rural Development Approach: Efforts of rural development in fifties, sixties and seventies in Bangladesh, India, Nepal, Sri Lanka; V-AID; Comilla model; Swanirvar Bangladesh movement; Gram Sarkar; Integrated Rural Development Program; MDGs and rural development approach in Bangladesh.

Theories of Rural Development and Rural Urban Interaction: Structural transformation theory; Jorgenson model; Dualism; Lewis model; Urban labor and food demand; Rural demand for manufactured consumption goods; Fei-Ranis Model, H-T Migration model.

Dimensions of Rural Development: Health and nutrition; Water supply and sanitation; Education; Service facilities; Transportation; Industrialization; Credit and finance.

Agencies Associated with Rural Development in Bangladesh: BADC, BRDB, LGRD, Palli Karma Sahayak Foundation (PKSF), NGOs– BRAC, Proshika, ASA, Grameen Bank.

Section – B

Rural Non-Farm Activities: Definition, role, structure and characteristics; Policy; Equity implication of RNA; Demand linkage; Supply side determinants.

Local Level Planning in Bangladesh: Definition; Contents; Approaches; Requirements; Upazila and union level planning; Micro level planning and development; Peoples participation; Triangular model.

Diffusion of Technology: Definition; State of technology in the production process; Scope and opportunities of adoption of new technology; Role of technology diffusion on rural economy; Major challenges of diffusing technology in rural Bangladesh.

Transformation of Rural Development: Meaning, dimension and outcome; Social and environmental effects of transformation of crop land into shrimp land in the south-western zone of Bangladesh.

Course No.: Econ 2204	Credit: 1.5	Year: Second	Term: Second
Course Title: Rural Development Issues − Fieldwork and Studio		**Course Status: Core**	

Rationale:

This course is the continuation of 'Econ 2203: Rural Development' as sessional work. Through attending the course, the students will be benefitted by having field visit and will gain practical knowledge about rural life, rural development efforts and rural and urban linkages.

Course Objectives:

The aim of this course is to:

- Enhance knowledge about the rural development issues through field visit, data collection and analysis.
- Identify and analyze the rural development problems.
- Make students get familiar with real problems of rural areas.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Trace out rural development problems and formulate research problems from their understanding and knowledge.
- Analyze real time rural development problems.
- Identify solutions to the problems by analyzing field data.
- Develop students' skill of formulating effective policies for rural development.

Course Content

Econ 2204 will cover the study of rural development issues and problems based on Course No. Econ 2203: Rural Development through field visit, data collection and analysis. This sessional course will educate students on how to identify and analyze rural development problems. Students will be assigned projects to identify rural development problems, related to

Agriculture
Unemployment
Landlessness
Poverty
Marketing of Agro-products
Education and Health
Transport and Communication, etc.

through field observation, rapid survey, detailed household survey. The findings will be presented in the form of short report supported by maps, charts, diagrams and tables. Seminar may be organized for presentation and open discussion.

Course No.: Econ 2205	**Credit: 3.0**	**Year: Second**	**Term: Second**
Course Title: Resource Economics		**Course Status: Core**	

Rationale:

Global resources are depleting day by day. Presently, near about 7,500 million people are living in this globe. To fulfill their day to day requirement people use resources. As Bangladesh is a developing country and there is a huge burden of population; hence, it is very much essential for a student to study resource economics to understand the reality of supply-demand mismatch in this respect.

Course Objectives:

The aim of this course is to:

- Provide basic knowledge about resource consciousness and functional aspects of resources.
- Make students aware about measuring and mitigating natural resource scarcity.
- Build up consciousness regarding existing resources of Bangladesh and its preservation and conservation.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Demonstrate all types of global resources and their proper use.
- Categorize resources on the basis of degree of economic importance.
- Use measurement techniques to estimate natural resource scarcity.
- Learn how to mitigate natural resource scarcity.
- Appraise strategies aimed at resource preservation and conservation.
- Prescribe policy issues in the way of preservation and conservation of natural resources.

Course Content
Section – A

Concept of Natural Resources: Definition; Evolution of resource consciousness; Distinction between wealth and resource; Functional aspects of resources; Various types of resources; Economic categories of resources; Relation between economics and ecology; Steady-state economics; Scarcity of resources; Mitigating scarcity of factors; Pricing of valuable factors; Categories of resources on the basis of degree of economic importance and discovery.

Renewable Resources: Basic concept on renewable resources; Growth curves; Rate of exploitation; Costs and revenues; A model with time dimension; Fundamental rule of renewable resource exploitation; Problem of extinction; Open and restricted access for resource harvest; Profit maximization and extinction.

Exhaustible Resources: Basic concepts on exhaustible resources; Hotelling's rule; Fundamental principle of exhaustible resource use; Diagrammatic exposition of optimal resource use; Resource price and backstop technology; Optimal use and depletion rules.

Measuring and Mitigating Natural Resource Scarcity: Malthusian and Ricardian scarcity recognition; Resource price path patterns; Scarcity and price/cost index, Geochemical and stock pollution constraints on resource exploitation; Resource scarcity mitigation: recycling and mitigation.

Section – B

Economics of Fisheries: Types on the basis of water body; Freshwater, marine water and culture fisheries stock; Fisheries enhancement by stocking; Stocking strategies; Impact of stocking on biodiversity; Economic importance; Harvesting and maximum sustained yield; Problems of fish culture and management strategies; Fishery production function; Static, open and regulated access model; Present value maximization.

Economics of Forestry: Spatial distribution; Major forests based on different land types of Bangladesh; Degradation; Management strategies; Social forestry – definition, objectives, scope, economic benefit and constraints; Volume function and mean annual increment; Optimal single rotation.

Economics of Wetlands: Characteristics of wetland; Social inefficiency and wetland resource use; Total economic value of wetlands; Inefficiency sources in wetland resource use – market and intervention failure; Mechanisms for social cost internalization.

Development, Preservation and Conservation: Conservation and preservation methods; Development and total economic value; Safe minimum standards; Irreversibility and sustainability.

Natural Resources and Government Policies: An overall view of government policies with conflicting results.

Course No.: Econ 2207	Credit: 3.0	Year: Second	Term: Second
Course Title: Patterns of Economic Development		**Course Status: Optional**	

Rationale:

The students must have some basic knowledge about the pattern of economic development. This course will give the students a clear view about the issues related to economic development that are derived from different countries' case studies.

Course Objectives:

The aim of this course is to:
- Provide knowledge about history of economic development.
- Introduce learners to different types of economic systems.
- Give the students idea about the trend of economic development of different countries.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:
- Demonstrate the patterns of historical development of present day developed countries.
- Review the different economic systems to identify the better one.
- Analyze the phases of development where one country needs to develop.
- Evaluate the strategies adopted by the different countries and explore the scope of applying these in the context of Bangladesh for further development.
- Judge why some countries are performing economically better than others.
- Design appropriate policies and strategies for furthering development of Bangladesh.

Course Content
Section – A

Introduction: History of modern economic development; Classical theory of development of a stationary state; Take off stage of a traditional economy; Determination of take off stage of UK, USA and Japan; Renaissance; New inventions and mass production; Prosperity of colonialists; Productive forces, Production relations and Mode of production in socialistic development; Marxian analysis in capitalist mode of production; Social reproduction; Simple and extended capitalist reproduction; Features of transition period from capitalism to socialism; Colonialism and imperialism.

Great Britain: Manorial system – characteristics and causes of breaking down; Medieval crafts and guilds; Enclosure movement – causes and effects; Enclosure movement and the agrarian revolution in England; Agricultural revolution as the basis of industrial revolution; Industrial revolution – characteristics and why it came in Britain first, consequences; Mercantilist and classical attitude – distinction, causes of adopting mercantilist attitude.

USA: American war of independence – causes and consequences; Civil War – causes and impacts; Great Depression –reasons and measures; The New Deal – concept, objectives, evaluation; Stages of economic development of USA.

Section – B

Soviet Russia: October Revolution – background; War Communism – features, effects, success and failures; NEP – features; Scissors Crisis.

Japan: Feudal economy and its disintegration; Meiji restoration – concept, reformative measures; Modern Japanese agriculture – features and role in economic development; Rise of Japan as a major industrial power; Zaibatsu – concept and role in economic development.

China: Pre-liberation period – socioeconomic condition; Land reforms; Agriculture – features; People's commune – structure, function, success; Great Leap Forward – features, consequences.

India: Development of Indian economy – Colonial and post-colonial periods; Orientation; Feudalism – example of the Indian sub-continent.

Course No.: Stat 2251	Credit: 3.0	Year: Second	Term: Second
Course Title: Statistics for Economists II		**Course Status: Core**	

Rationale:

It is necessary to have an advanced level of understanding of statistical tools for any contemporary economists to analyze different economic phenomena. This course provides a broad introduction to statistical concepts and techniques for data analysis related to inferential statistics. The course is basically concerned with the development of an understanding of statistical practice in drawing inferences and importantly how it is applied in economics.

Course Objectives:

The aim of this course is to:

- Familiarize students with basic concepts of probability, probability distribution, sampling theory and inferential statistics.
- Provide knowledge and skills of using inferential statistics in economics.
- Train up students in analyzing time series data and using regression in economics.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Understand probability, probability distribution, sampling theory and inferential statistics and how they are used in economics.
- Use appropriate probability distribution in determining the probability that a discrete/continuous random variable will have a given value or a value in a given range.
- Explain why a sample is generally more practical than a census and differentiate between the probability and non-probability approaches to sampling, and understand when different approaches are appropriate.
- Calculate and interpret various relevant statistics from a sample and make inferences with regard to the population they represent.
- Test hypothesis regarding populations by analyzing sample information and draw conclusion regarding the underlying population.
- Analyze time series data and use regression technique in analyzing economic data.

Course Content
Section – A

Elementary Probability Theory: Definitions of probability; Conditional probability; Independent and dependent events; Mutually exclusive events; Concepts and theories of probability – total and compound; Set theories of probability.

Probability Distributions: Normal distribution; Binomial distribution; Relation between the binomial and normal distributions; Poisson distribution; Relation between the binomial and Poisson distributions; Multinomial distribution; Application in economics.

Sampling: Advantages; Types – random, stratified random, cluster, systematic, multistage, purposive and sequential; Sample size; Sample size determination; Sampling and non-sampling error; Application in economics.

Sampling Theory: Random samples and random numbers; Sampling with and without replacement; Sampling distributions.

Section – B

Test of Hypothesis: Definition and types of hypothesis; Level of significance; Testing the significance of difference between two sample mean and population mean; Test of significance for attributes; Testing the significance between two sample means, Test of significance of co-efficient of correlation; Application in economics.

Chi-Square Test: Definition; Significance; Test for goodness of fit; Formula for chi-square computation.

Regression: Least squares regression; Linear regression; Regression coefficient; Error of estimate; Explained and unexplained variation; Application in economics.

Time Series Analysis: Time series; Graphs of time series; Characteristic movements of time series; Classification of time series movements; Time series analysis; Moving averages; The smoothing of time series; Estimation of trend; Estimation of seasonal variations; Estimation of cyclic variations; Estimation of irregular variations; Summary of the fundamental steps in time series analysis; Application in economics.

Course No.: Stat 2252	Credit: 2.0	Year: Second	Term: Second
Course Title: Sessional on Statistics for Economists II		**Course Status: Core**	

Rationale:

Gaining a practical knowledge in applying advanced statistical tools is also necessary for any contemporary economists to analyze different economic phenomena efficiently and effectively. This course provides a broad scope to exercise statistical concepts and techniques for data analysis related to inferential statistics. The course is basically concerned with the development of an understanding of statistical practice in drawing inferences and importantly how it is applied in economics.

Course Objectives:

The aim of this course is to:

- Make students capable of applying the concepts of probability, probability distribution and sampling theory in economics.
- Provide knowledge and skills of applying inferential statistics in economics.
- Train up students in analyzing practical time series data and using regression in economics with real life data.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Apply the concepts of probability, probability distribution, sampling theory and inferential statistics in economics.
- Choose the appropriate probability distribution in determining the probability that a discrete/continuous random variable will have a given value or a value in a given range.
- Test hypothesis in analyzing sample information and drawing conclusion regarding the underlying population.
- Handle time series data to use regression technique in data analysis.

Course Content

This sessional course will be primarily based on Course No. **Stat 2251: Statistics for Economists II**. Apart from other aspects the course will cover exercises on the followings:

Probability and Economics: Probability and its use in economics.

Probability Distribution and Economics: Various probability distributions and their use in economics.

Regression and Economics: Regression analysis and its use in economics.

Test of Hypothesis and Economics: Various test of hypothesis and its use in economics.

Time Series Analysis and Economics: Applicability of various time series data in economics and its use in trend analysis.

Course No.: BA 2253	Credit: 3.0	Year: Second	Term: Second
Course Title: Business Communication		**Course Status: Optional**	

Rationale:

This course is designed to provide students a comprehensive view of communication, its scope and importance in business, and the role of communication in establishing a favorable business environment.

Course Objectives:

The aim of this course is to:

- Make students familiarize with the use of basic and advanced writing techniques that today's technology demands.
- Provide knowledge and skills of writings, effective and concise letters and memos; and preparing informal and formal reports, Curriculum Vitae and cover letter.
- Train up students in conducting excellent interviews and completing follow-up employment correspondence.
- Make the students capable to Plan successfully for and participate in meetings and conduct proper techniques in telephone usage.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Describe main forms of communication; Communication networks; nature of business, communication model, communication barriers, overcoming barriers, business meetings, rules of conducting & participating in effective meetings.
- Narrate, analyze and apply 6 C's of ideal writing, principles of business writings, non-discriminatory writing, common jargons and acronyms in business, writing for effect.
- Explain traditional business letters, parts of business letters, punctuation, letter formatting & composition, e-mail: different business letter situations – good news, bad news, neutral and apply concepts in business correspondence.
- Apply the concept of intercultural and international communication, cultural differences in business decision

making.
- Understand and apply oral presentation & public speaking, basic parts of presentation, methods & tricks of good presentation in business environment.
- Conceptualize nonverbal communication (NVC), major forms of nonverbal communication, improving NVC.

Course Content
Section – A

Communication in the Workplace: Importance of communication in business; Main forms of communication; Communication networks of the organization; Nature of business and communication needs; Communication model, Communication barriers; Ways of overcoming communication barriers; Business meetings; Rules of conducting and participating in effective meetings; Meeting minutes.

Fundamentals of Business Writings: 6 C's of ideal writing; Adaptation; Selection of proper words; Writing process, Principles of business writings; Non-discriminatory writing; Common jargons and acronyms in business; Writing for effect; Ways of bringing right effect to business writing; You view point.

Major Business Correspondences: Traditional business letters; Office memo; Major parts of business letters; Punctuation; Letter formatting and composition; E-mail: advantages and disadvantages; Adaptation to different business letter situations – good news, bad news, neutral or routine and persuasive (sales).

Communication across Cultures: Intercultural and international communication; Cultural differences; Challenges in intercultural communication; Ways to overcome challenges; Back-translation.

Section – B

Business Reports: Definition of report, Basics of report writing; Formal and informal reports; Report proposals; The report structure of long formal report; Different heading systems; Conventional method; Parallel construction; Enriching reports with figures; Charts and data; Writing references.

Oral Presentation and Public Speaking: Oral presentation and public speaking; Basic parts of presentation; Methods and tricks of good presentation; Elements of good talking; Listening; Ways to develop listening skills.

Nonverbal and Intercultural Communication: Nonverbal Communication (NVC); Importance of nonverbal communication; Major forms nonverbal communication; Improving NVC.

Communication for Personal Career: Cover letters; Strategy in job applications; CV and Résumé writing; Tips for facing interviews.

Course No.: CSE 2254	Credit: 1.5	Year: Second	Term: Second
Course Title: Data Analysis and Statistical Software Lab.		**Course Status: Core**	

Rationale:

This course attempts to equip the students with application of computer software for managing and analyzing database. It specifically addresses economic issues through applying computer software like MS Excel, STATA etc. for entering, processing, cleaning, sorting, coding and analyzing database.

Course Objectives:

The aim of this course is to:
- Familiarize students with application of computer software for database management.
- Enable students to edit and organize data through computer software.
- Develop students' skill to analyze data to address research problems.
- Build up capacity to present and interpret results.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:
- Understand the basic concepts of computer application software.
- Use computer application software for managing database; viz., data entry and data cleaning.
- Organize, process, code and recode, and edit database for analysis.
- Use computer software for analyzing data.
- Construct tables, figures to present data.
- Interpret the results derived from data analysis.

Course Content

CSE 2252 - Data Analysis and Statistical Software Lab. will cover the study of computer application in database management. This sessional course will educate students on how to use computer and its application in database management. Specifically, it will address the followings:

Database management based on:

Microsoft Excel, STATA and other computer packages.

Course No.: Econ 3101	Credit: 3.0	Year: Third	Term: First
Course Title: Microeconomics II		**Course Status: Core**	

Rationale:

The course is designed to make the students acquainted with the advanced level concepts and theories of microeconomics.

Course Objectives:

The aim of this course is to:

- Introduce learners with the advanced level tools and theories of microeconomics.
- Build up understanding the link between theory and practice.
- Make students able to apply that knowledge with respect to practical policy issues.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Demonstrate advanced knowledge on concepts and theories of microeconomics.
- Analyze the nature of consumer and producer behavior in more sophisticated form.
- Conceptualize how the nature of buyers and sellers interaction in the market depends on the nature and type of the markets to settle equilibrium price and quantity.
- Identify the conditions of overall welfare of the economy.
- Explore the determinants of production decision under complicated real world situations.
- Detect real life happenings in the sphere of microeconomics, on the basis of acquired theoretical knowledge.

Course Content
Section – A

Theory of Consumer Behavior: Concept of – utility function, indifference curve, marginal rate of substitution; Maximization of utility, first and second order conditions of consumer's equilibrium; Derivation of ordinary/Marshallian and compensated/Hicksian demand function from utility function; Properties of ordinary and compensated demand functions; Derivation of Slutsky equation and its interpretation – negative substitution effect, differentiating normal, inferior and Giffen goods, cross effects.

Economics of Production: Concept of – production function, isoquant curve, marginal rate of technical substitution; Optimizing behavior of firm – constrained output maximization, constrained cost minimization and profit maximization; Cobb-Douglas and CES production function – degree of homogeneity, marginal product of labor and capital, elasticity of substitution and other economic implications.

Theory of Market: Price-output determination under monopolistic competition, duopoly and oligopoly market structure; Non-collusive oligopoly – Cournot, Stackelberg and kinked demand curve model; Collusive oligopoly – cartel, joint-profit maximization, market-sharing cartel, low-cost firm price-leadership, dominant firm price-leadership, market signaling, asymmetric information.

Section – B

Welfare Economics: Measurements of welfare; Concept of Pareto optimality and Pareto non-optimality; Pareto optimality in production, consumption and product mix; Indeterminacy problem in Pareto optimality criterion; Concept of social welfare function and bliss point; Welfare maximization and perfectly competitive market; Pareto optimality criterion and externality in production and consumption; Kaldor-Hicks compensation principle; Corner solution; Theorems of welfare economics.

Linear Programming: Concept of linear programming; Basic solution; Basic feasible solution; Optimal solution; Solution of maximization and minimization problem through graphical and simplex methods; Concept of primal and dual problems; Transformation of primal into dual problem and vice-versa; Economic interpretation of duality theorems; Duality and marginal analysis.

Input-output Analysis: Basic idea regarding inter-industry relationship; Concept of intermediate and final demand; Mathematical presentation of the model; Input co-efficient matrix; Technology matrix; Solution for appropriate levels of output/final demand and labor requirement; Hawkins-Simon condition and its economic implication.

Micro Economics in Practice: Exercise with field-level/hypothetical data on demand, supply, elasticity, utility, budget, production and cost; Orientation to and understanding of the basic concepts of microeconomics prevailing in surroundings.

Course No.: Econ 3103	Credit: 3.0	Year: Third	Term: First
Course Title: Economic Planning		Course Status: Optional	

Rationale:
This course encompasses concepts and ideas of planning techniques and strategies followed by the government of capitalistic and mixed economic system. This course is also helpful to confer knowledge to the students about the methods and importance of economic planning in an economy.

Course Objectives:
The aim of this course is to:
- Acquaint students with the concept of planning, different types of plan and planning techniques followed by capitalistic, socialistic and mixed economy.
- Introduce students with the process of local level and micro level policy formulation.
- Provide an improved understanding in domestic resource mobilization, transfer of technology and financial issues in the planning of Bangladesh.

Intended Learning Outcomes (ILOs):
At the end of this course students will be able to:
- Acquire knowledge on concepts and techniques of economic planning.
- Outline the approaches, requirements and environment of local level and micro level planning in Bangladesh.
- Compare and contrast between the planning processes of different economic system.
- Examine how planning machineries in Bangladesh play its role towards economic development.
- Assess the strengths and weaknesses of both internal and external financing towards development.

Course Content
Section – A

Introduction: Concept of planning; Necessity of planning; Market imperfections and allocative efficiency; Resource gap; Characteristics of a good plan; Obstacles in implementation of

planning in Bangladesh; Controls under planning – conceptualization, types, major features of physical planning.

Planning Methodology: Type of plans on the basis of functions and duration; Five year plans; Annual plan as an instrument of planning – public sector food budgeting, public sector resource budgeting, food budgeting, rolling plan, participatory perspective plan; Determination of planning strategies: Input-output analysis and its use in planning process.

Local Level Planning: Concept, importance, process of formulation of local level planning; Scope of local government bodies of Bangladesh in local level planning; Contents, approaches, requirement, upazila and union level planning; Micro level planning and development; Peoples participation; Triangular model.

Domestic Resource Mobilization for Planning: Domestic resource mobilization – techniques of resource mobilization, taxation, subsidies, mobilization of surplus labor; Types of sources of financing for planning; Components under internal and external sources; Foreign aid – necessity and impact in planning.

Section – B

Comparative Systems in Economic Planning: Nature of planning in capitalistic, socialistic and mixed economy; Planning model; Role of public and private sectors.

Choice of Technique: Background; Types of techniques; Arguments in favor and against of labor-intensive and capital-intensive techniques; Relevance with Bangladesh.

Transfer of Technology: Conceptualization on basis of technology; Necessity of transfer of technology; Channels of technology transfer.

Planning Machinery in Bangladesh: Planning commission of Bangladesh – administrative setup, organs, functions, institutional linkage and role of this commission; Influence of bureaucracy and politics in planning; Role in economic development.

Financial Issues in Planning: Regional budget allocation and regional disparity; Donor's attitude towards Bangladesh; Financing in mega-projects though internal financing; Lack of utilization of development fund; Role of state in successful planning and implementation.

Course No.: Econ 3105	Credit: 3.0	Year: Third	Term: First
Course Title: Environmental Economics		**Course Status: Core**	

Rationale:
This course attempts to equip students with economic concepts, methods, tools and techniques for analyzing environmental phenomena.

Course Objectives:
The aim of this course is to:
- Develop understanding of the interrelationship between environment and economics.
- Train up students to identify the impact of externality on market failure.
- Motivate students to address environmental pollution in Bangladesh from economic viewpoint.

Intended Learning Outcomes (ILOs):
At the end of this course students will be able to:
- Understand interrelationship between economics, environment and resources.
- Identify how externality influences market failure.
- Apply economic approaches and instruments to solve environmental problems.
- Estimate environmental benefits and costs.
- Evaluate environmental decision making process.
- Diagnose causes and extent of environmental pollution in Bangladesh.

Course Content
Section – A

Introduction: Relation between economics and the environment; Circular flow model; Material Balance Model; Types of pollutant; Sources of pollution; Pollution heaven hypothesis; Scope of environmental damage; Damage function; Environmental quality; Sustainable development; Risk analysis; Pollution reduction versus pollution prevention.

Dealing with Resources: Types of resources; Theory of optimal harvest of renewable resources; Static model of effort-harvest function; Revenue and cost strategy of a profit maximizing firm dealing with renewable resources; Fundamental principle of exhaustible resource extraction and use.

Market Failure: Public good; Externality; Modeling the market of environmental quality – a public good; Modeling environmental damage as a negative externality; External cost; Competitive versus efficient equilibrium; Property right; Coase theorem; Common property resources.

Conventional Solution to Environmental Problems: Command and control approach; Environmental standard; Allocative efficiency of standards; Cost effectiveness; Equi-marginal principle of optimality.

Economic Solution to Environmental Problems: Market instruments; Pollution charge; Subsidy; Deposit-refund system; Pollution permit trading system.

Section – B

Environmental Decision Making: Public policy process; Environmental public policy development; Key players in environmental decision making – environmentalists, private firms, govt., scientists and economists.

Valuation of Environmental Benefits and Costs: Incremental benefit; User versus existence value; Damage function method; Political referendum method; Contingent valuation method; Averting expenditure method; Travel cost method; Hedonic price method; Engineering approach; Survey approach.

Benefits-Cost Analysis: Present value determination; Inflation correction; Present value of benefits and costs; Benefit-cost ratio; Allocative efficiency and cost effectiveness.

Strategic Planning for Sustainable Development: Sustainable development; Conflict between economic gain and environmental quality; Industrial ecosystem; Industry's response to pollution; Agenda 21.

Environmental Pollution in Bangladesh: Major polluting sources; Threats; Environmental pollution – local, national and global perspectives; Impacts of pollution; Environmental policy.

Course No.: Econ 3107	Credit: 3.0	Year: Third	Term: First
Course Title: Public Finance		**Course Status: Core**	

Rationale:

In this course students will learn details about government income and expenditure with rationale and options of intervention. This course will have a similar focus on local government.

Course Objectives:

The aim of this course is to:

- Depict rationale and area of government intervention in an economy.
- Develop analytical skills of the students to evaluate the public budget of Bangladesh.
- Guide to identify the strength and weakness of local government and its link with central government.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Acquaint students with the budgetary process of Bangladesh.
- Identify the sources and options of government income and expenditure.
- Search out the effect of direct and indirect tax on consumer, producer and on the economy.
- Explore government option to tackle deficit financing and public debt.
- Demonstrate role, scope, and strength of the local government.

Course Content
Section – A

Introduction: Definition, importance of and subject matter/scope of public finance; Distinction between public finance and private finance; Concept of principle of exclusion and non-exclusion; Non-rival consumption; Free-rider problem; Hidden-preference problem; Divisibility and indivisibility of goods; Consumption and production externality; Public and private goods; Quasi/impure public and private goods.

Scope of Government Activity: Public sector in the circular flow of income and national income accounts; Importance of state intervention; Allocation, distribution and stabilization function of a state; Concept of private and social cost and benefit; Concept of market failure and externality and public sector intervention; Provision for social/public good, merit good; Optimal production and pricing of public good; Private provision for public goods.

Public Revenue: Definition and classification of tax and non-tax revenue; Sources of tax and non-tax revenue; Types of tax – direct, indirect, single, multiple, value added tax, ad-valorem tax; Principles of taxation; Cannons of taxation; Base of tax; Elasticity of tax; Concept of a good tax system; Principle of maximum social advantage.

Effect of Tax: Impact, incidence and effect of tax; Forward and backward shifting of tax burden; Shifting of tax burden through tax capitalization; Demand and supply elasticity and tax burden; Concept of tax multiplier; Problem of double taxation; Dead-weight and welfare cost of taxation; Effect of taxation on production, employment, inflation, income-distribution and stabilization.

Section – B

Public Expenditure: Meaning, nature and kinds of public expenditure; Concept of govt. expenditure multiplier, transfer payments multiplier; Consequences of multiplier effect; Effect of govt. expenditure on production, employment, inflation, income distribution and economic stabilization; Wagner's law of increasing state activity; Wiseman-Peacock hypothesis.

Public Budget: Definition; Classification of budget – balanced and unbalanced budget; Balanced budget multiplier; Analysis of budgets of Bangladesh.

Deficit Financing and Public Debt: Concept of budget deficit; Methods of deficit financing; Impact of budget deficit on economic growth and employment; Meaning and necessity of public debt; Effect of debt on economic growth and inflation; Burden of public debt; Debt as a means to regulate economy; Shifting of burden to future generations; Debt redemption and debt management.

Local Government in Bangladesh: Definition, strengths, weaknesses, power, role and functions of local government; Autonomy of local govt. bodies; Historical development of local government in Bangladesh; Different tiers; Local government reforms; Center-local relation; Grant from central govt.; Local resource mobilization; Institutional capacity, Accountability; Local financing sources; Problems and possibilities of enhancing local financing; Heads of local level expenditure.

Course No.: Econ 3108	**Credit: 1.5**	**Year: Third**	**Term: First**
Course Title: Fiscal Management – Fieldwork and Studio		**Course Status: Core**	

Rationale:

This course provides practical orientation in fiscal management issues of local government. Students will be encouraged to study on different local government bodies of Bangladesh in this course.

Course Objectives:

The aim of this course is to:

- Aware students about the application of obtained theoretical knowledge on fiscal management.
- Detect level of empowerment of local government in formulating and implementing policy.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Identify the sources of income originated from local and central government.
- Find out regular and occasional dimensions of expenditure.
- Analyze role and types of assistance provided by central government.
- Measure scope and strength of local government in the development of Bangladesh.

Course Content

This field work and studio course will be mainly the application of obtained knowledge on public finance. Students will be assigned to work in group/individual to study financial management systems of Bangladesh. The course will cover issues like sources of income, financial power, empowerment of local government bodies, expenditure pattern of local governments, like, *Zila Parishad, Upazila Parishad, Pourashav*a, Union *Parishad* etc.

Course No.: Econ 3109	Credit: 03	Year: Third	Term: First
Course Title: Population Studies		Course Status: Optional	

Rationale:

The aim of this course is to make the students familiar with the concepts, theories of population and their application in formulating population policy and planning.

Course Objectives:

The aim of this course is to:

- Develop a clear idea about the evolution and present scope of demography, population projection and age-sex structure, regional variation, nature and causes of demographic transition.
- Introduce students to various sources of demographic data with focus on census and registration system.
- Develop skill regarding projection techniques to formulate population policy.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Demonstrate different terms of demography and measure different indicators of demographic processes.
- Conceptualize different indicators and frameworks for measuring fertility and mortality.
- Analyze migration, spatial distribution and urbanization.
- Use projection techniques in other social sector projection.
- Analyze evidence related to institutional context of gender and gender-based inequalities and linkages between gender, population, development and reproductive health.
- Assess the role of government interventions, policies and programs in controlling population.

Course Content
Section – A

Introduction and Basic Concepts: Demography – definition, nature, scope, importance and relation with economics; Still births, fatal death, live births, sterility, parity, contraception, fecundity and fertility; Fertility and mortality rates, cohort, ratio, proportion, rates.

Theories of Population: Malthusian theory of population; Post-Malthusian theory; Theory of optimum population; Biological theory of population; Theory of demographic transition; Social and economic theories of population; Marx's theory of surplus population; Leibenstein's population law; Applicability in Bangladesh perspective; Stationary and stable population model.

Population Analysis: Measurement of population; Types and sources of demographic data – census, survey, registration; Sources of data in Bangladesh; Concept of life-table; Construction of a complete life-table and its interpretation; Fertility – biological and social component; Explanations for high and low fertility; Measurement of fertility; Mortality – components, causes of death, measuring mortality; Differentials in mortality by social class, marital status, sex, age and housing – rural and urban; Trends and levels in mortality.

Population Composition and Population Projection: Age-sex composition and groups; Age indices; Age pyramid; Educational composition – literacy differentials and determinants, examples from Bangladesh; Measuring age structure – population pyramids, average age and dependency ratio; Measuring sex structure; Impact of population processes on age-sex structure; Impact of age-sex structure on population processes; Concept of population projection and forecasts; Measurement of population growth; Growth rate; Techniques of population projection.

Section – B

Health Status of Population and Human Resource Development: Health, economic, social, household and environmental statistics; Strategies, policies and problems of human resource development (HRD) in Bangladesh; Human Development Index (HDI); Poverty-health inter-linkage in Bangladesh; Health-environment interaction in the context of Bangladesh; Poverty reduction through improvement of health.

Migration: Concept, type, pattern, causes and consequences of migration; Measuring migration; Theories of migration; Urbanization – concept, causes, consequences, problems and policy issues.

Population Policy and Planning: Concept and different types of population policies – policies to reduce fertility and mortality; Policies and programs in population control − problems and issues; Family planning program of Bangladesh – achievements and challenges.

Population vis-a-vis other Economic Parameters: Effects of population growth on resources, consumption, savings, investment and development; Consequent problems of excess growth and related issues (examples/application with reference to Bangladesh).

Course No.: Econ 3111	Credit: 3.0	Year: Third	Term: First
Course Title: Economics of South-western Bangladesh		Course Status: Optional	

Rationale:

This course attempts to analyze structure, contribution, potential and challenges of major economic sectors of South-western part of Bangladesh.

Course Objectives:

The aim of this course is to:
- Identify the structure of major economic activities in the South-western region of Bangladesh.
- Explore economic potential of the Sundarbans and Mongla port.
- Analyze main obstacles to socioeconomic development of this region.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:
- Understand economic importance and demographic features of the South-western Bangladesh.
- Diagnose shrimp-paddy conflict in the region.
- Evaluate investment climate of the region.
- Realize economic importance of the Sundarbans and estimate the potentiality of tourism in the region.
- Summarize frequency, severity and impact of hazards in the region.

Course Content
Section – A

Introduction: Definition of South-western Bangladesh; Area coverage; Basic features of the region; Economy size; Contribution to the national economy.

Demographic Features: Population; Rural-urban distribution; Sex; Education; Age; Occupational distribution; Land ownership; Migration; Income distribution.

Agriculture Sector: Agricultural activities; Land coverage; Change in

agricultural pattern over time; Major crops; Cropping pattern; Production; Problems and prospects.

Shrimp-Paddy Conflict: Production; Merits and demerits; Short-run versus long-run comparison; Multiplier effects of rice and shrimp cultivation; Trend over the time period; Environmental consequences; Impact on employment, income, domestic demand and export earnings.

Industry Sector: Major industrial activities; Classification; Raw material sourcing; Manufacturing process; Production; Output destination – regional, national and abroad; BSCIC; EPZ; Challenges and opportunities.

Mongla Port: History; Present status; Importance; Problems and prospects; Necessary steps for its up gradation.

Section – B

Business Environment: Investment climate; Infrastructure; Governance; Access to finance; SME; Market linkage.

Infrastructure and Utility Services: Road condition; Railway; Waterways; Airport; Seaport; Bridge; Transportation; Electricity; Gas.

Hazards: Flood; Water logging; Cyclone; Frequency, severity and impact; Fighting against hazards; Pre, during and post disaster activities; Role of individuals, organizations and government.

The Sundarbans: History; Location; Features; Contribution to economy; Preservation, maintenance and sustainability; Threats and potentials.

Tourism: Prospects; Facilities; Constraints; Role of organizations and government; Prospective sources; Promotional packages for tourist attraction; Safety and security.

Problems and Prospects of South-western Bangladesh: Budget allocation; Water resources; Energy resources; Trade and commerce; Transport and communication; Alternative sources of investment; Environmental risk.

Course No.: Math 3151	Credit: 3.0	Year: Third	Term: First
Course Title: Advanced Mathematics for Economists		**Course Status: Optional**	

Rationale:

This course will introduce the advanced mathematical tools that are used in analyzing several macroeconomic issues i.e. growth of national income, capital stock, investment, renewable and nonrenewable resources over time. It will further lay foundation for modeling optimal extraction and intra and intergenerational distribution of these resources. Moreover, it will help in designing strategies to maximize national, community and individual economic agents' benefit.

Course Objectives:

The aim of this course is to:

- Demonstrate the economic applications of dynamic optimization, non-linear programming and game theory.
- Develop an initial understanding of how economic variables are related with time horizons.
- Familiarize students with the game theories and make them able to use these tools in making strategic decision under perfect and imperfect information.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Demonstrate a sound knowledge and understanding of the application of various concepts of dynamic optimization, non-linear programming and game theory.
- Apply dynamic optimization in finding solutions for dynamic stability of macroeconomic issues.
- Use these tools for designing optimal harvesting and extraction policy towards protecting renewable and non-renewable resources.
- Use non-linear programming in optimizing non-linear economic function with inequality restrictions.
- Use game theory in formulating strategic decisions towards optimal solution of an economic activity when two or parties involved.

Course Content
Section – A

Introduction to Economic Dynamics: Modeling time; Definition and classification of difference equation; Definition and classification of differential equation; Concepts of first order differential and difference

equation; Application in economics.

Second Order Differential and Difference Equation: Second order differential equation; Characteristic root; Conjugate complex numbers; Trigonometric functions; Derivatives of trigonometric functions; Transformation of imaginary and complex numbers; Stability conditions; Application in economics.

Simultaneous Differential and Difference Equations: Matrix solution of simultaneous differential equations; Matrix solution of simultaneous difference equations; Stability and phase conditions of differential equations; Stability and phase conditions of difference equations; Application in economics.

The Calculus of Variations: Dynamic optimization; Distance between two points on a plane; Euler's equation and necessary condition for dynamic optimization; Finding candidates for extremals; Sufficiency conditions the calculus of variations; Dynamic optimization subject to functional constraints; Application in economics.

Section – B

Optimal Control Theory: The Hamiltonian and the necessary conditions for maximization in optimal control theory; Sufficiency conditions for maximization in optimal control; Optimal control theory with a free endpoint; Inequality constraints in the endpoints; Application in economics.

Comparative Statistics and Concave Programming: Introduction to comparative statistics; Comparative statistics with one endogenous variable; Comparative statistics with more than one endogenous variable; Comparative statistics for optimization problems; Comparative statistics used in constrained optimization; The envelope theorem; Concave programming and inequality constraints.

Theories of Games: Some definitions; Two-person zero sum game − certainty and uncertainty model; Prisoner's dilemma; Games with perfect information − Nash equilibrium theory, application of Nash equilibrium in oligopoly market structure; Mixed strategy equilibrium; Coalition games; Games with imperfect information− Bayesian games, economic application of Bayesian games in duopoly market; Provision of public good; Auctions; Juries; Extensive games− Nash equilibrium with imperfect information, beliefs and sequential equilibrium; Signaling games; Economic applications.

Course No.: Math 3152	**Credit: 2.0**	**Year: Third**	**Term: First**
Course Title: Sessional on Advanced Mathematics for Economists		**Course Status: Optional**	

Rationale:

This course intends to introduce students with dynamic and strategic mathematical methods and their applications which are drawn from a wide range of fields in economics including microeconomics, macroeconomics, resource economics, environmental economics, agricultural economics and managerial economics.

Course Objectives:

The aim of this course is to:

- Introduce students with the concepts, methods and tools to handle dynamic optimization, non-linear programming and game theories.
- Develop skills for simulating objective function with respect to time horizon.
- Develop students' skills to restructure existing economic models with logical approach.
- Develop skills to interpret the derived the economic model logically.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Identify and demonstrate dynamic optimization and strategic decision making tools used by professional economists.
- Apply different advanced mathematical tools in various branches of economics.
- Use optimal control theory in resource and environmental economics.
- Promote the applications of game theory in designing strategic decisions between two and multi-party rivalry.

Course Content

This sessional course will be primarily based on Course No. **Math 3151: Advanced Mathematics for Economists**. Apart from other aspects the course will cover exercises on the followings:

Second Order Differential and Difference Equation: Application of analyzing dynamic stability in market equilibrium, national income.

Simultaneous Differential and Difference Equations: Use of Simultaneous differential and difference equations in economics.

The Calculus of Variations: Use of calculus of variations in monopolists' product demand, utility from consumption analysis, and other constrained optimization problem.

Optimal Control Theory: Use of Optimal control theory in renewable, non-renewable resource depletion analysis, several other resource and environmental issues.

Theories of Games: Illustration of the use of games theory in designing strategies, bargaining and several related issues in duopoly and oligopoly market structures, application in dealing with common property resources.

Course No.: Econ 3201	Credit: 3.0	Year: Third	Term: Second
Course Title: Macroeconomics II		Course Status: Core	

Rationale:

This course is designed to acquaint students with advanced level concepts and theories of macroeconomics.

Course Objectives:

The aim of this course is to:

- Make students acquainted with the advanced level tools of macroeconomics.
- Disseminate comprehensive understanding of higher level theories in this branch of economics.
- Develop skill to apply acquired knowledge with respect to policy issues.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Understand basic concepts and theories of macroeconomics.
- Conceptualize the procedure of constructing aggregate demand and aggregate supply of an economy.
- Realize how commodity market, money market and labor market interact to settle equilibrium value of major macroeconomic variables.
- Evaluate the nature, types, causes and consequences of inflation and unemployment in the economy.
- Develop idea to design appropriate stabilization policy.
- Analyze real life happenings in the sphere of macroeconomics.

Course Content
Section – A

Aggregate Demand and Aggregate Supply: Concept, derivation, shape and location; Macroeconomic equilibrium; Short-run aggregate supply curve; Recession and deflation; Recovery; Expansion and inflation; Stagflation; Long-run aggregate supply curve; Supply shock; Demand-side and supply-side economics; Consumption demand; Income hypotheses – absolute, permanent, relative and life-cycle; Investment demand; Accelerator model of investment.

Demand for Money: Definition; Components of demand for money – transaction demand, precautionary demand, speculative demand; Supply of and demand for money; Money market equilibrium; Impact of change in money demand and money supply on equilibrium condition; Fisher's and Cambridge versions of quantity theory of money; Friedman's version of modern quantity theory of money.

IS-LM Framework: Concept and derivation of IS and LM functions and IS and LM curves in two, three and four sector economy; Goods market and money market equilibrium; Causes of shift of IS and LM curves and their impact on equilibrium; Elasticity of IS and LM curves and effectiveness of fiscal and monetary policy; Introduction of issues of labor market and price level changes in IS-LM framework.

Section – B

Inflation and Unemployment: Trade-off between inflation and unemployment; Philips curve; Concept of expected inflation; Rational expectation hypothesis; Expectations-augmented Philips curve; Short-run and long-run Philips curve; Adjustment to monetary and fiscal expansion/contraction; Interest rate and inflation; Alternative strategies to reduce inflation.

Stabilization Policy: Issues and ideas; Great depression; Monetarist-Keynesian debate; Policy objectives and trade-off; Difficulties of stabilization policy; Policy lag – internal and external lags; Uncertainty and economic policy; Role of fiscal policy and monetary policy; Automatic stabilizers; Concept of crowding out; Demand-side and supply-side policies.

Macroeconomics in the Open Economy: Trade and capital flow with fixed exchange rate; Concept of internal and external balance; Policy dilemma; Effect of disturbances – increase in autonomous spending and exports; Use of tariff and devaluation policy; Concept of capital mobility; Policy mix; Trade and capital flow with flexible exchange rate; Exchange rate and competitiveness; Equilibrium income and balance of payments; Impact of fiscal and monetary expansion; Concept of purchasing power parity.

Course No.: Econ 3203	Credit: 3.0	Year: Third	Term: Second
Course Title: History of Economic Thought		Course Status: Optional	

Rationale:

This course focuses on classical economics, covering the literature from Adam Smith to Keynes onward including topics of value, distribution, money, trade, economic growth and public finance as well as economic policy issues.

Course Objectives

The aim of this course is to:

- Explain the main ideas developed by prominent economists of different ages.
- Introduce student with the origins of some of the key concepts in modern economics.
- Comment critically on historical texts in economics.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Develop a solid thought on the history of economic theories.
- Think critically about the boundaries of economic analysis in a broader socioeconomic context.
- Discuss critically how different economists understood and analyzed economic problems.
- Compare the works of influential economists, notably Adam Smith, David Ricardo, Thomas Malthus, Stanley Jevons, Karl Marx, Alfred Marshall and so on.
- Demonstrate critically diverse theories of value, growth, rent etc.
- Apply gathered knowledge to understand and interpret developments in contemporary society.

Course Content
Section – A

Introduction: Importance of studying history of economic thought; Development of history of economic thought; Mercantilism – definition, main idea, evaluation; Cameralism; Physiocratic school of thought – definition, main idea, evaluation; Main ideas developed by Mun, Petty, Cantillon, Hume, Law.

Classical Economics: Thoughts of Adam Smith, Thomas Malthus, David Ricardo, John Stuart Mill, Nassan William Senior; Review of classical theories of income, employment, wage, money and interest – scope and method; Laws of classical economics; Classicism and laissez-faire; Appraisal of classicism.

Marxian Economics: Labour theory of value; Concept of surplus value; Theory of rent; Theories of – capitalistic competition and exploitation, economic development; Concept of proletariat, bourgeoisie and class struggle; Evaluation of Marxian economics.

Section – B

Neo-classical Economics and Marginal Revolution: Concept; Thoughts of W.S. Jevons, Karl Menger, Walras, Pareto, Schumpeter; Transition from classical to neo-classical economics; Concept of utility; Alfred Marshall and his works; Historical school; The institutionalists; Theories of imperialism; Neo-classical welfare economics.

Keynesian Revolution: Economics of Keynes; Great depression and Keynes; Refutation of neo-classical principles; Wage, interest and money theories of Keynes; Theories of inflation and depression.

Post-Keynesian and Recent Developments: Monetarist school; Friedman; Principles of monetarism; Reformulation of quantity theory of money; Radical economists; Neo-Keynesianism; Structuralists; Demand-side versus supply-side economics; Evolution of mathematics, econometrics and empirical methods; Behavioral economics; Experimental economics.

Course No.: Econ 3205	Credit: 3.0	Year: Third	Term: Second
Course Title: Research Methodology		**Course Status: Core**	

Rationale:

This course attempts to familiarize students with the steps of accomplishing a good research. It will highlight on conceptualization, literature review, objective fixation, sampling design, data collection and analysis, result and discussion, report writing, citation and referencing to accomplish a research chronologically.

Course Objectives:

The aim of this course is to:

- Introduce students with the process of preparing a research proposal.
- Explain the steps and procedure of accomplishing a good research.
- Outline the method of data collection and analysis as well as writing of good report.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Explain variety of approaches to research.
- Understand the nature of qualitative and quantitative research.
- Criticize research approaches, designs, results and implications.
- Design and use appropriate tools and procedures for data collection and analysis.
- Write a standard report and deliver research findings in front of academicians and scholars.

Course Content

Section – A

Introduction: Definition of research; Objective of research; Types of research; Methods of research; Scope of research; Necessity of research; Importance of research; Research method versus methodology; Social research.

Research Proposal: Components of a research proposal – topic, title, objective, research question, study rationale, study design, work

plan, budget, methods, study team, expected output; Study versus project proposal.

Literature Review: Sources of literature; Citation from literature; Sequential arrangement of literature; Paper/book-wise versus topic/issue-wise presentation of literature; Research gap identification.

Qualitative versus Quantitative Research: Focus group discussion (FGD); Key informant interview; Case study; Quantitative techniques to address research problem; Hypothesis testing; t-test; Correlation; Regression analysis.

Sampling: Population vs. sample; Sampling frame; Sampling techniques; Types – probability sampling, non-probability sampling, purposive sampling, convenience sampling, quota sampling, simple random sampling, systematic sampling, stratified sampling, cluster sampling, multistage sampling; Steps in sampling; Sample size; Sampling error.

Section – B

Descriptive Statistics: Mean; Median; Mode; Percentile; Cross-tabulation; Graph; Comparison among groups/sub-groups.

Data Processing, Presenting and Analysis: Data entry; Coding; Data cleaning; Data processing; Manual and computer application; Procedure of data presentation; Qualitative versus quantitative approaches to data analysis; Statistical and mathematical tools for data analysis.

Result and Discussion: Key findings of data analysis; Arrangement of findings; Discussing findings to compare and contrast the results with available literature.

Report Writing: Structure and components of a formal and quality report; Types of report; Layout of a research report; Contents of a research report; Mechanism of writing a research report; Study versus project report; Editing; Proof reading.

Citation and Reference Writing: Citation versus reference; Citation in – beginning, middle and end of a sentence; Citing data source; Reference for tables, graphs and figures; Listing references; Reference writing style – consistency and uniqueness.

Course No.: Econ 3206	Credit: 1.5	Year: Third	Term: Second
Course Title: Research Methodology - Fieldwork and Studio		**Course Status: Core**	

Rationale:

This course attempts to orient the students practically with the steps of a good research. It will provide training on conceptualization, literature review, objective fixation, sampling design, data collection and analysis, result and discussion, report writing, citation and referencing for accomplishing a good research chronologically.

Course Objectives:

The aim of this course is to:

- Develop skill to prepare a research proposal.
- Make acquainted with the steps and procedure of conducting a good research.
- Suggest for applying qualitative or quantitative approaches.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Formulate a research proposal.
- Review relevant literature in a systematic way.
- Apply the procedure of drawing representative sample form population.
- Collect and analyze data as well as write a good report.
- Use citation and reference in appropriate style.
- Write a standard report and demonstrate research findings in front of academicians and scholars.

Course Content

This field work and studio course will be mainly the application of the Course No. Econ 3205: Research Methodology. Apart from other aspects, the course will cover exercise on the followings:

Writing Proposal
Reviewing Literature
Sampling Design
Processing, Presenting and Analyzing Data
Presenting Descriptive Statistics
Interpreting Results
Writing Report
Citing References

Course No.: Econ 3207	**Credit: 3.0**	**Year: Third**	**Term: Second**
Course Title: International Economics		**Course Status: Core**	

Rationale:

This course focuses on theories of international trade, exchange rate regimes, international capital flows and speculation, multilateral and regional trade agreements and trade policy.

Course Objectives:

The aim of this course is to:

- Make student familiar with basic concepts of international trade.
- Provide knowledge and develop skills to compare different trade theories and their applicability.
- Train up students to analyze commercial policy, regional integration issues, balance of payment and exchange rates.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Recognize how labor and capital affect trade models and the welfare effects of trade.
- Examine the major instruments of trade policy such as tariffs and subsidies and their economic effects.
- Evaluate economic effects of free trade agreements and other types of preferential agreement with special focus on Bangladesh.
- Understand various theories related to balance of trade and balance of payments.
- Realize functioning of foreign exchange market and determination of exchange rate.

Course Content
Section – A

Introduction: Concept, definition, subject matter and scope of international economics; Distinction between international and interregional trade; Need for studying international economics; Purpose of international economic theories and polices; Current international economic problems.

Theory of International Trade: Laws of absolute and comparative cost advantage; Haberler's theory of opportunity cost; Theory of reciprocal demand; Heckscher-Ohlin model; Factor-price equalization theorem; Leontief Paradox.

Demand and Supply, Offer Curve and Terms of Trade: The equilibrium relative commodity price with trade – partial equilibrium analysis; Offer curves; Derivation of offer curve; The equilibrium relative commodity price with trade – general equilibrium analysis; Relationship between general and partial equilibrium analysis.

Trade and Welfare: Gains from trade; Measurement and distribution of the gains from trade; Stolper-Samuelson theorem; Factor intensity reversal; Factor-price equalization and income distribution; Terms of trade; Types of terms of trade, their movements and welfare implications.

Section – B

Commercial Policy: Free trade versus restricted trade; Infant industry argument; Tariff; Effects of tariff; Analysis of the optimum tariff; Concept of nominal and effective protection; Other trade barriers– export tax, export and import subsidy, quota, input subsidy; Concept of tariff war; Effect of tariff on a small/large country.

Theory of Economic Integration: Preferential trading club; Free trade area; Customs union; Common market and economic union; Customs union–static effect, trade creation and trade diversion effect.

Balance of Trade and Balance of Payments: Components of balance of payments; Equilibrium and disequilibrium in the balance of payments; Causes and types of BOP disequilibrium; Devaluation to correct BOP deficit; Success of devaluation and elasticity of demand and supply; Marshall-Lerner condition.

Basic Theories of Balance of Payments: Elasticity approach to the balance of trade; Elasticity and J curves; Absorption approach to the balance of trade; Monetary approach to the balance of payments.

Exchange Rate: Concept of equilibrium exchange rate; Determination of equilibrium exchange rate–fixed and flexible exchange rate; Concepts of exchange rate – depreciation/appreciation and devaluation/overvaluation; Sources of international finance– IMF, IBRD, IDB.

Course No.: Econ 3208	Credit: 1.5	Year: Third	Term: Second
Course Title: Current Economic Affairs - Fieldwork and Studio		Course Status: Core	

Rationale:

This course opens scopes for the students to gather knowledge on the nature and pattern of international trade of Bangladesh. Moreover, students will have scopes for analyzing the linkages among the growth of Bangladesh economy and international trade variables and policies.

Course Objectives:

The aim of this course is to:

- Accumulate knowledge on the nature and pattern of international trade in Bangladesh.
- Evaluate a wider scope of international trade behavior and international trade policy of Bangladesh.
- Analyze different current economic issues in qualitative and quantitative ways.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Build up a foundation of analyzing different economic issues associated with internal trade and policies.
- Analyze the causal relationship of GDP, exchange rate volatility and other international trade variables.
- Estimate the contribution of FDI, Remittances, foreign loans and aids in GDP share of Bangladesh economy.
- Examine political economy of several organizations, treaties and agreements to the development of the Bangladesh economy.

Course Content

Apart from other aspects, the course will cover exercise on the followings:

Qualitative and quantitative analysis on:

- Applications of trade theories in practice
- Trade relations with the trade partners of Bangladesh
- Commercial policy of Bangladesh and its' development impact
- Impact of exchange rate volatility on development
- Remittances and manpower export of Bangladesh and its' development impact etc.

Course No.: Econ 3209	Credit: 3.0	Year: Third	Term: Second
Course Title: Financial Economics		Course Status: Optional	

Rationale:

The aim of this course is to acquaint students with different financing and investment options. This course includes a thorough coverage of the application of both old and new theoretical perspectives to understand current environment for financial investment decisions.

Course Objectives:

The aim of this course is to:

- Share an idea about financial market for both short and longer maturity.
- Explore the best investment option considering constraints.
- Provide idea about various emerging non-bank financial institutes and their functional mechanism.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Calculate present and future of an amount with varied interest and frequency.
- Estimate return of an investment with different risk and probability of occurrence.
- Elucidate share market, functions of share market and share distribution mechanism.
- Determine the value of long-term securities, compare and choose option having relative idea on advantages and disadvantages.
- Chalk out the role of non-bank financial institutes regarding investment.

Course Content
Section – A

Role of Financial Management: Concept of financial management; Goal of the firm; Financial management function; Concept of financial market – money market, capital market; Financial intermediaries.

Time Value of Money: Concept of interest – simple and compound; Present value and future value determination with simple and compound interest; Annuities; Amortization.

Risk and Return: Definition and measurement; Risk and return of a portfolio; Attitudes towards risk; Diversification; Systematic and unsystematic risk; Capital asset pricing model.

Working Capital Management: Concept of working capital and working capital management; Significance of working capital; Optimum level of current assets, relation with risk and liquidity; Types of working capital; Financing current assets.

Section – B

Capital Market: Basic concept of capital market; Components of capital market; Security issuance – Initial Public Offerings (IPO); Private placement; Public issue; Regulations of security issuance; Secondary market.

Valuation of Long-term Securities: Concept of valuation – face value, market value; Bond valuation with finite maturity and perpetual bond; Preferred stock valuation; Common stock valuation; Rates of return.

Non-bank Financial Institutions: Insurance companies; Investment banker – concept, functions; Mutual fund – concepts, benefits; Bangladesh context.

Course No.: Econ 3211	Credit: 3.0	Year: Third	Term: Second
Course Title: Entrepreneurship Development		**Course Status: Optional**	

Rationale:

The course is designed to make aware students about the real business world and entrepreneurial environment of doing business in national and international spheres.

Course Objectives:

The aim of this course is to:

- Make students acquainted with entrepreneurship, entrepreneurial challenges of starting new ventures.
- Enable students to investigate, understand and internalize the process of setting up an enterprise.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Gain better understanding about the entrepreneurial qualities and environment of being an entrepreneur.
- Understand and get enthusiasm from lifestyle of some successful national and international entrepreneurs.
- Apply acquired knowledge that can help them in the practical life.
- Examine the potentials of small business in Bangladesh.
- Explore the role of government in creating business environment.

Course Content

Section – A

Entrepreneurship Development: Concept of entrepreneurship development; Meaning of entrepreneurship; Entrepreneur and entrepreneurship; Intrapreneurship versus entrepreneurship; Historical background of entrepreneurship; Traits and issues related to entrepreneur; Steps of entrepreneurial process; Positive versus negative factors of entrepreneurship; Entrepreneurship development cycle; Entrepreneurship and economic development.

Qualities of an Entrepreneur: Entrepreneur; Manager; Wage employment and Intrapreneur; Corporate Entrepreneur – comparative study; Roles, responsibilities, career opportunities; Relationship among income generation, self-employment and entrepreneur;

Personal characteristics; Functions of an entrepreneur; Environment for entrepreneurial activities; Case studies of successful entrepreneurs.

Franchising: Definition, meaning and types; Franchising versus Distributorship/Agency; Advantages to the franchisee and franchisor; Franchisee relationship; Steps in starting franchisee; Cautions in franchising.

Techniques of Improving Entrepreneurial Skill: Identifying and developing entrepreneurial qualities; Tools for enhancing ability of the entrepreneurs; Creativity and entrepreneurship development; Characteristics of creative person; Creative person versus entrepreneur; Improving managerial skill; Entrepreneurial motivation and development.

Theories of Entrepreneurship Development: Psychological or personal theory; Achievement motivation theory;Motiveacquisitiontheory;Risk-takingtheory;Internal-external locus of control theory; Background factor theory; Innovation theory.

Section – B

Small Business Management: Introduction to small business; Definition, size, types and spread of small scale and medium scale enterprises; General characteristics of small business; Role of small business; Factors responsible for success and failure of small business; SMEs – access to finance, barriers and windows; Government assistance and institutional support to small business development.

Small Business in Bangladesh: Role and problems of small business; Business practice in Bangladesh; MIDAS and its MIDI program; Role of SME foundation; BSCIC and other organization under the entrepreneurship and small business development in Bangladesh; Women entrepreneurship in Bangladesh; SME policy strategies in Bangladesh.

Business Plan: Concept, necessity, elements; Detailed outline of a business plan; Writing a winning business plan; Reasons of failing business plan; Case studies on generating business ideas and identifying problems and opportunities.

Government Role: Promoting entrepreneurship with various incentives, subsidies, grants – with special reference to 'Export oriented units'.

Course No.: Econ 4101	Credit: 3.0	Year: Fourth	Term: First
Course Title: Applied Economics		**Course Status: Core**	

Rationale:

This course is important for students to understand the relevance and application of economic concepts and theories in both public and private sector decision making.

Course Objectives:

The aim of this course is to:

- Introduce students with the nature and causes of state intervention in a free market economy.
- Familiarize students with the idea of government regulation in perfectly competitive and monopoly market.
- Provide an idea about labor market dynamism, management relationship and unemployment issues in developing and developed countries.
- Acquaint students with the idea of social security and social welfare, population problem and problem of poverty and inequality in Bangladesh.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Understand how and in what conditions government might interfere in the market economy.
- Get a comprehensive and realistic idea about the nature and scope of state intervention in the form of nationalization, deregulation and privatization in Bangladesh.
- Measure the efficiency of resource allocation between a perfectly competitive market and a monopoly market.
- Conceptualize and compare different issues, aspects and actions undertaken by social security programs in both developed and developing countries.
- Diagnose the problems of population, poverty, unemployment and inequality that affect economic development of LDCs like Bangladesh.

Course Content
Section – A

Introduction: State intervention; Concept, rationale and role of the state in economic development; State in the matters of economic welfare; Nationalization of industries – causes, merits and demerits; Nationalization in Bangladesh – historical background and problems; Concept of public goods and services; Responsibility and efficiency of the state.

Competition, Monopoly and Government Regulation: Output and pricing decision under competition and monopoly; Efficient resource allocation under competition; Regulation under perfect competition; Natural and legislated monopoly; Social cost of monopoly; Concept of regulation; Goals and objectives of regulation; Methods of regulation; Regulation of a natural monopoly; Problems of regulation.

Labor and Management Relationship: Pricing of the services of the factors of production; Short and long run demand for labor; Allocative efficiency; Labor union and monopsony; Minimum wage legislation; Bangladesh perspective.

Section – B

Social Security and Social Welfare: Conceptualization; Social and global security; Components of social and global security.

Unemployment Issues: Concept of unemployment and full employment; Analysis of unemployment problems; Nature of unemployment problem in the LDCs and remedial measures; Bangladesh perspective.

Population Problem: Economics of population and development; Malthusian theory; Theory of demographic transition with reference to Bangladesh; Modern microeconomic theory of fertility; Policy approaches with reference to Bangladesh.

Problems of Poverty and Income Inequality: Concept of poverty – absolute poverty, relative poverty, income poverty, human poverty; Concept of income inequality; Causes of poverty and income inequality; Govt. attempts to alleviate poverty with reference to Bangladesh; Regional variation in different types of poverty.

Course No.: Econ 4102	Credit: 2.0	Year: Fourth	Term: First
Course Title: Thesis Proposal		**Course Status: Core**	

Rationale:

This course encourages students to think and focus on a particular issue of economics for undertaking an independent research. It provides the opportunity for students to develop their skills in research, writing and presentation.

Course Objectives:

The aim of this course is to:
- Enhance students' capacity to undertake independent research.
- Train to develop thesis proposal, literature review, citation and reference style.
- Facilitate students to fix appropriate research methodology and steps.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:
- Gain substantial knowledge in the area of their interest that motivates student to carry out a research.
- Demonstrate the ability to initiate research and to formulate viable research questions.
- Express the capacity to design, conduct and report original research.
- Apply methodical approaches to research problems.
- Demonstrate the capacity to plan independent research and to communicate this in a research proposal and orally to the academic community.
- Write citation and references in prescribed style and also develop students' awareness of plagiarism.

Course Content

The completion/registration of this course will be a prerequisite for registering the course **Econ 4202: Thesis** in the subsequent term. This course requires the students to submit an in-depth thesis proposal on a selected topic having relevance to economic issues/problems under the guidance of supervisor(s). Students will know about the following issues through this course:

- Idea of thesis and report
- Originality of research
- Plagiarism
- Problem identification
- Idea generation
- Searching relevant literatures
- Data and data sources
- Methodology
- Citations
- Writing references
- Developing thesis proposal.

Course No.: Econ 4103	Credit: 3.0	Year: Fourth	Term: First
Course Title: Econometrics I		**Course Status: Optional**	

Rationale:

This course introduces the students to the theory and practice of econometrics. It emphasizes the techniques for basic empirical research, interpretation of quantitative results and model evaluation. The course will cover basics of ordinary least square methods, model specification, maximum likelihood estimation and Limited dependent variable models which will be required for performing individual research.

Course Objectives:

The aim of this course is to:

- Familiarize students with a wide range of important quantitative skills required both for academic and research works.
- Provide a foundation of empirical approaches to economics to draw inferences.
- Acquaint students with econometric tools for analyzing data.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Acquire a broad knowledge of regression analysis relevant for analyzing economic data and to deal with real world problems.
- Analyze data for econometric analysis, and generate and test hypotheses.
- Validate the models in the single equation context and evaluate the outcomes of empirical analysis.
- Understand theoretical background for the standard methods used in empirical analysis, like properties of least squares estimators and the statistical testing of hypothesis.
- Use several statistical and econometric analyzing tools and techniques e.g. statistical package STATA.

Course Content
Section – A
Introduction: Definition of econometrics; Goal; Scope; Division; Types; Economic relationship among variables; Economics, mathematical economics, statistics and econometrics - A comparative discussion; Econometric methodology.
Prerequisites for Regression Analysis: Types of data and their uses, Historical versus modern interpretation of regression; Regression versus correlation; Dependent and explanatory variables; Types, sources and accuracy of data; Measurement scale.
Two Variables Regression Analysis: Bivariate relationship; Correlation coefficient; Time as a regressor; Transformation of variables; Lagged dependent variable as a regressor; Stationary and non-stationary series; Linearity; PRF; SRF; Stochastic, disturbance term, goodness of fit, Gauss-Markov theorem.
Extension of Two Variables Regression: Method of Ordinary Least Square (OLS); Assumptions of OLS method; Derivation, properties and precision of LSE; Coefficient of determination; Probability distribution of disturbances; Normality assumption; One-tail versus two-tail test; t-test; Accepting versus rejecting hypothesis; 'Zero' null hypothesis; 2-t rule of thumb; Forming null and alternate hypothesis; Choosing level of significance; p value.

Section – B

Basics of Multiple Regression Analysis: Three-variable model; Multiple regression model; Partial regression coefficients; OLS estimation; Variance, standard error and properties of OLS estimators; Maximum likelihood estimators; Multiple coefficient of determination and correlation; R^2 versus adjusted R^2; Cobb-Douglas production function estimation; Non-linearity in regression model; Elasticity estimation.

Additional Aspects of Multiple Regression Analysis: Coefficient interpretation of Log-linear, semi log, reciprocal models; Hypothesis testing; Testing overall significance; F test; Restricted least square method; Chow test; Test of stability of regression coefficients; Omitted variable bias.

Maximum Likelihood Method: Concept, assumptions, theory, application, reasons to use.

Multicollinearity: Nature, theoretical reasons, practical consequences, various tests for multicollinearity.

Autocorrelation: Nature, problems, consequences, Detection of autocorrelation; Graphical method; Runs test; Durbin-Watson d test; Breusch-Godfrey test; Remedial measures of autocorrelation; GLS for autocorrelation correction; Newey-West method.

Heterosedasticity: Nature, theoretical reasons, consequences, detection procedure; Various tests i.e. Park test, Breusch-Pagan-Godfrey test, White test, Koenker-Bassett test; Remedial measures by WLS; Method of Generalized Least Square (GLS); White's correction.

Course No.: Econ 4104	Credit: 2.0	Year: Fourth	Term: First
Course Title: Sessional on Econometrics I		**Course Status: Optional**	

Rationale:

The students will be able to develop the skills needed for empirical research using basic econometrics techniques in this course. Through their computer based assignments, they will be trained in conducting research using primary data. The students will also deepen their other transferable skills such as written communication, teamwork, numeracy, computer literacy, problem solving and analytical skills in economic field of research through this course.

Course Objectives:

The aim of this course is to:

- Help and orient the students to exercise different tools and techniques of econometrics.
- Guide the students to interpret the econometric model estimation results.
- Acquaint the students to conduct a demo research project using the discussed econometric tools.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Apply the program (STATA) in regression analysis of empirical data.
- Be an expert user of econometric methods.
- Perform statistical tests to investigate whether the classical assumptions in regression analysis are satisfied.
- Conceptualize the literature concerning empirical analysis.
- Read and understand project reports and journal articles that make use of the concepts and methods that are discussed in the course.
- Apply econometric models in own academic research work, for example in analysis needed for thesis.

Course Content

This sessional course will be primarily based on Course No. **Econ 4103: Econometrics I**. Apart from other aspects, the course will cover exercise on the followings:

Application of Basic Concepts: One-tail versus two-tail test; t-test; Accepting versus rejecting hypothesis; 'Zero' null hypothesis; 2-t rule of thumb; Forming null and alternate hypothesis; Choosing level of significance; p value.

Regression Analysis: Application of regression in economics.

Ordinary Least Square Method: OLS approach for solving economic problems.

Two-variable Linear Regression Analysis: Examples and exercises of two-variable regression in economics; Constructing CI; Prediction; Reporting and evaluating regression results; Regression through the origin; Scaling and units of measurement; Functional forms of regression models.

Application of Multiple Regression Analysis: Examples and exercises of multiple regression in economics; Implications of Maximum Likelihood, 2SLS.

Course No.: Econ 4105	Credit: 3.0	Year: Fourth	Term: First
Course Title: Regional Economic Development		**Course Status: Optional**	

Rationale: The pattern of economic activity is subject to change by several factors like location, migration, technology adoption, trading agreement and so on. Hence, being a student from branch of economics, he/she should learn about the response of the pattern of economic activity with respect to different pull and push factors. Accordingly, this course attempts to orient the students with regional economic development in compliance with the change in pattern of economic activity.

Course Objectives:
The aim of this course is to:
- Deliver students knowledge about patterns of dualism.
- Portray students a clear understanding about globalization and its effect on global economy.
- Examine how variation in geographic pattern causes variation in the pattern of trade.

Intended Learning Outcomes (ILOs):
At the end of this course students will be able to:
- Analyze the aftermath of dualism of an economy.
- Evaluate the curse and boon of globalization.
- Understand how trading pattern varies due to several geographic exogenous factors.
- Grasp knowledge of regional economic development in South Asia.

Course Content
Section – A

Introduction: Definition of regional economics; Meaning of regional economic development; Scope of regional economics; Importance of studying regional economics; Regional economies in global contexts; Household and community economics in dynamic tension with regional and global economies.

Dualism: Social dualism; Technological dualism; Distinction between social dualism and technological dualism; Effects of dualistic structure on employment; Sociological barriers to economic development according to J.H. Boeke; Features of the traditional sector and modern sector in a dual economy; Model of interaction between the advanced sector and indigenous sector in developing economy according to W. Arthur Lewis; Process of cumulative causation – backwash effect and spread effect.

Globalization: Meaning; Emergence; Fuelling factors; Components and dimensions; Beneficiaries; Criteria for measuring; Political economy of globalization.

Western Association of Regional Cooperation: EU, BRICS and NAFTA.

Section – B

Trade Policy Debate: Types of development policy; Import substitution versus export promotion; Fourfold categorization – primary outward looking policy: demand side and supply constraints, secondary outward looking policy, primary and secondary inward looking policy; Argument for tariff protection and trade optimists and trade pessimists; South-south trade and economic integration; Economic integration – theory and practice; Rationale of economic integration – trade creation and trade diversion; Regional trading blocs – problems and prospects.

New Economic Geography: Centripetal and centrifugal forces; Geographic pattern of economic development; Impact of distance and transport cost on per capita income; Transit and transshipment; Climate and disease.

Regional Planning and Development Policy: Regional planning; Need for balanced regional development; Regional differences in poverty of Bangladesh.

South Asia and Regional Cooperation: Regional trading groups; South Asia's trade outside the region; Trade of SAARC with other regional blocs; SAARC and economic cooperation; Pros and cons of preferential arrangements; SAPTA; Policy issues for SAPTA; Benefits of regional cooperation; Policy implications.

Course No.: Econ 4107	**Credit: 3.0**	**Year: Fourth**	**Term: First**
Course Title: Economics of Climate Change		**Course Status: Optional**	

Rationale:

During the last several decades, like many other countries of the World, Bangladesh has been experiencing different problems associated with climate change i.e. drought, salinity, global warming, sea level rise etc. Therefore, a course to address climate changes from economic viewpoint is inevitable. This course broadly focuses on economic instruments to address climate change.

Course Objectives:

The aim of this course is to:

- Enhance students' capability of understanding the pull and push factors of climate change.
- Perceive the consequences of climate change.
- Introduce students with climate adaptive action and climate centric policies.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Understand the risk of hazard due to climate change.
- Assess any project's financial as well as economic viability along with the environmental consequences.
- Trace out and quantify economic and environmental consequences of climate change.
- Analyze the environmental policies and realize the importance of climate adaption and mitigation.

Course Content
Section – A

Introduction: Relationship among climate, environment and economy; Notions on climate change and climate variability; Key issues addressing climate change; Threats and challenges of arsenicosis with mitigation strategies; Pollution – types, sources; Regional and global pollution.

Economic Instruments: Different policy tools – carbon tax, tradable permits, subsidies, standards, R&D, and technology transfer; Emission trading; Beyond perfect competition – uncertainty; Market power; Transactions costs; Technological change; Internalizing the externalities.

Cost-Benefit Analysis and Climate Change: Economic foundations of cost-benefit analysis (CBA); Stages of CBA; Nature of benefits and costs of climate change and climate policy.

Economics of Kyoto Protocol: Economic structure of Kyoto protocol – context and coverage; Kyoto allocations; International flexibility mechanism – emission trading; Joint Implementation (JI) and Clean Development Mechanism (CDM).

Section – B

Economic Modeling of Global Climate Change: Role of economic models in greenhouse debate; Overview of G-cubed multi-country model; Different models and cost of Kyoto protocol.

Mitigation and Adaptation: Scope of mitigation and adaptation; Difference between mitigation and adaptation; Types of adaptations; CBA of mitigation and adaptation.

Developing Countries and Climate Change: Impacts of climate change on developing countries; Carbon funds and CDM; CDM and sustainable development.

Climate Change and Bangladesh: NAPA; Green Climate Fund for Bangladesh; Various development programs adopted for addressing climate change impacts in Bangladesh; Role of government and non-government agencies for adapting with climate change impacts.

Policy Responses to Climate Change: Politics, policy and law in climate change; Preventive measures; Adaptive measures; Future of climate change policy; Barriers to effective policy implementation.

Course No.: Econ 4109	Credit: 3.0	Year: Fourth	Term: First
Course Title: Islamic Economics		**Course Status: Optional**	

Rationale:

Islamic Economics deals with economic problems in the light of rules and regulations as prescribed by the Holy Qur'an and *Sunnah*. Man is considered as the vicegerent of the creator. They cannot claim ownership of resources rather consider it as trustee to them. In this course economic problems will be addressed from the perspective of Islamic rules and regulations.

Course Objectives:

The aim of this course is to:

- Provide knowledge about the relation between man and creator.
- Make aware about the sovereignty of Allah SWT.
- Develop consciousness about production, consumption, distribution, trade and exchange in Islam.
- Illuminate key economic variables from the viewpoint of Islam.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Understand the key ideas of Islamic Economics.
- Demonstrate basic principles guiding revenue and expenditure in an Islamic society.
- Realize the detrimental effects of interest.
- Assess the harms of usury, gambling, speculation, profiteering, hoarding etc.

Course Content
Section – A

Introduction: Concept of Sovereignty of Allah SWT; Man as vicegerent of Allah SWT; Islamic conception of man; Islamic economic thought; Islamic Economics – definition, nature and scope; Features of Islamic economic system; Comparison with capitalistic and socialistic economic system; Superiority of Islamic economic system.

Production in Islam: Production organization; Factors of production; Production relation; Role and status of labor and entrepreneurs; Appropriation of income and wealth and distribution of it; Role of state in production; Provision of public and private goods.

Distribution in Islam: Income and wealth as conceived in Islam; Rules of distribution and redistribution of income and wealth; Property rights; Islamic law of inheritance; Economic empowerment of women; Concept of equitable distribution of income and wealth.

Trade and Exchange in Islam: Usury, gambling, speculation, profiteering and hoarding in Islam.

Section – B

Consumption in Islam: Concept of circumscribed consumption and spending; Accumulation of wealth; Miserliness; Extravagance.

Capital and Investment in Islam: *Riba* vs. interest; Profit and capital formation; Islamic banking; Profit and loss ssharing in Islam as against capitalist system; Concept of exploitation; Role of state vis-à-vis the exploiting class and the exploited.

Public Finance in Islam: Historical development of Islamic public finance; Sources of revenue in an Islamic state: *Zakah*, *ushr*, *sadaqah*, *ganimah*, *zizyah*; Basic principles guiding revenue and expenditure in an Islamic State; Role of state in the sphere of public finance.

Social Welfare in Islam: Concept of social welfare; Islamic prescription for addressing poverty; Pre-requisites for the success of Islamic economic system; Socioeconomic justice; Charity versus justice; Justice versus efficiency.

Course No.: Econ 4111	**Credit: 3.0**	**Year: Fourth**	**Term: First**
Course Title: Industrial Economics		**Course Status: Core**	

Rationale:

This course attempts to conceptualize the students about the interaction and interdependency between economics and industry. Specifically, it focuses on industrial classification, efficiency, location, concentration, diversification and finance related issues. It also highlights on industrial sector of Bangladesh.

Course Objectives:

The aim of this course is to:

- Conceptualize the nature of interdependence between industry and economics.
- Give an orientation of industrial efficiency, concentration and location choice.
- Develop understanding of industrial finance.
- Address industrial sector of Bangladesh.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Classify firms and quantify efficiency of manufacturing units.
- Understand the dynamics of market structure and industry performance.
- Measure industrial concentration.
- Explore the factors determining industrial location.
- Examine inter-industry relationship.
- Diagnose industrial sector of Bangladesh.

Course Content
Section – A

Introduction: Microeconomics versus industrial economics; Scope of industrial economics; History of industrial economics; Objective of industrial units; Firm versus industry; Market structure, conduct and performance – SCP paradigm.

Classification and Size of Firms: Classification – size, use, input and proprietorship-based; Firm size – small, medium and large scale

units; Advantages and disadvantages of large and small firms; Optimum firm; Factors determining optimum firm size.

Efficiency: Technical efficiency; Factor-price efficiency; Productive efficiency; Determinants of efficiency; Measurement of efficiency; Concept of optimization and constrained optimization; Efficiency and decision making; Economies of scale.

Market Structure for Firm and Industry: Perfectly competitive, monopoly, monopolistic competition and oligopoly market structure for firm and industry.

Industrial Concentration: Determinants of industrial concentration; Concentration curve; Concentration ratio; Hirschman-Herfindahl index; Gini coefficient; Lerner index; Utton index; Concentration and market performance; Concentration and Technological change.

Section – B

Diversification and Integration: Concepts of diversification, integration, merger and acquisition; Horizontal versus vertical perspectives; Motives for diversification and integration.

Industrial Finance: Sources of industrial finance – institutional, non-institutional, public and private; Need for finance; Types of finance; Short-run versus long-run finance; Internal versus external finance; Advantages and disadvantages; Industrial finance – Bangladesh perspective.

Location of Industry: Factors determining industrial location – technical, economic, infrastructural and others; Weber's theory; Theory of Tord Palander.

Inter-industry Relation: Input-output analysis; Raw material; Intermediate product; Final product; Input coefficient matrix; Final demand vector; Leontief matrix; Optimum solution and interpretation.

Industrial Sector of Bangladesh: Major industries; Contribution to the economy; History of industrialization in Bangladesh; Government initiatives; Industrial policy; EPZ; Private sector and international response; Sick industries; Problems and potentials of industrialization in Bangladesh.

Course No.: Econ 4113	Credit: 3.0	Year: Fourth	Term: First
Course Title: Institutional Economics		**Course Status: Optional**	

Rationale:

This course is designed to introduce students with the idea of institution and institutional environment of a country, so that they can perceive how institutions do play an important role for economic and non-economic decision making in a country.

Course Objectives:

The aim of this course is to:

- Introduce students with the concepts, types and structure of institution.
- Acquaint students with a comprehensive idea about institutional environment of a country.
- Demonstrate idea about theories and concepts of transaction cost economics.
- Clarify about game theory, property rights issues, economies of information and institutional analysis and development.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Acquire a comprehensive idea about institutional structure and institutional environment of a country.
- Conceptualize the theories of transaction cost economics and apply those theories at organizational level.
- Demonstrate game theories with special application to real life decision making in different institutional environment.
- Portray how property rights play a role in different legal environment.
- Evaluate the role of institution in economic development of a country.

Course Content
Section – A

Introduction: Concept of institution; Individual and institutional structure; Types of institutions; Concept of New Institutional Economics (NIE); Bounded rationality and opportunism; Foundations of NIE; Branches of NIE; Scope of NIE; Analytical levels of NIE; Necessity of institutions in economic framework.

Institutional Environment: Legal environment and property rights; Norms and social conventions; Economic history and economic growth; Political theory; Complexity and cognitive science.

Transaction Cost Economics: Conventional theory of the firm; Concept of transaction; Concept, categories and sources of transaction cost; Measuring transaction costs; Problems of measuring transaction costs; Transaction costs and institutional choice.

Transaction Cost Theory: Limits of organization; Firm, market and law; Market versus hierarchy; Economic institutions of capitalism; Mechanisms of governance.

Section – B

Introduction to Game Theory: Concept and approaches of game theory; Birth of game theory; Players, strategies, rules and payoffs; Relevance of strategic thinking; Example of strategic thinking; Interpretation of Nash equilibrium; Rationality question and existence of Nash equilibrium; Game theory under complete information.

Understanding Property Rights: Concept and types of rights; Property rights regimes; Legal pluralism; Importance of property rights – incentives, control over resources, welfare and empowerment; Coase theorem, problems with the Coase theorem; Example of Coase theorem.

Economics of Information: Definition of information; Economic roles of information; Economic properties of information; Microeconomics and macroeconomics of information.

Institutional Analysis and Development: Development in terms of different theoretical positions; Definition of institution building; Public choice theory; Development theory and discourse; New political economy; Institutional analysis; Discourse analysis.

Course No.: Econ 4201	Credit: 3.0	Year: Fourth	Term: Second
Course Title: Project Planning and Evaluation Technique		Course Status: Core	

Rationale:

Project planning and evaluation technique is an important branch of knowledge that a graduate of Economics needs to know. This course provides students with an overview of project management, focusing on project planning and evaluation technique. A discussion of the different types of projects, the project life cycle as well as the intricacies of defining and monitoring project resources, cost, scope and schedule are included in this course.

Course Objectives:

The aim of this course is to:

- Familiarize students with basic concepts of project planning.
- Provide knowledge and skills of comparing different projects and their applicability.
- Train up students in learning and applying the tools and techniques in initiating and planning a project such as estimating the project budget and cost, developing a project plan, developing a project schedule, management of risks, preparing project proposals, mobilizing the project resources, and evaluating which project to select.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Demonstrate the basic concepts of project planning.
- Understand the principles of project formulation, approval and implementation procedure.
- Carry out project evaluation.
- Perform project monitoring and evaluation.
- Use network techniques to develop project scheduling and analyze factors affecting project schedule.
- Evaluate implementation process of projects in Bangladesh.

Course Content
Section – A

Introduction: Definition; Development process, plan, program and project; Basic features of a project; Purpose and types of project; Institutions and organizations involved in formulation, implementation, monitoring and evaluation of a project.

Project Planning and Analysis: Overview of project planning; Necessity; Types; Steps; Eligibility; Merits and demerits; Availability of fund; Terms of Reference (TOR); Generation and screening of project ideas; Market and demand analysis; Technical analysis; Financial estimates and projections.

Project Formulation: Micro development projects; Projects for commercial enterprises; Project Concept Paper (PCP), Project Proforma (PP); Technical Assistance Project Proforma (TAPP).

Project Approval: Benefit-cost ratio; Beneficiaries; Implementation procedure; Quality control mechanism; Physical, financial and economic viability; Contract signing.

Project Implementation: Objectives and goals; Activities; Steps/Phases; Budget; Duration; Division of work; Supervision; Reporting; Cross-check; Feedback; Modification; Threats; Constraints.

Section – B

Project Evaluation: Need for evaluation; Project evaluation-commercial, technical and economic evaluation; Techniques of project evaluation; Cost-benefit analysis; Discount ratio; Investment criteria; Risk analysis of single investment; Social cost-benefit analysis.

Project Implementation and Monitoring: Monitoring and evaluation; Definition, necessity and type of monitoring; Procedure of monitoring; BMRE of industries.

Network Techniques for Project Management: Development of project network; Time estimation; Determination of the critical path; Scheduling when resources are limited; PERT model; CPM model; Network cost system; Log frame analysis.

Factors Affecting Project Schedule: Positive factors; Negative factors; Pre-project problems; Problems during implementation; Post-project problems.

Plans and Projects in Bangladesh: Concerned ministry; Planning commission; Executive Committee of the National Economic Council (ECNEC); Economic Relations Division (ERD); Board of investment-roles and functions; Five-year and annual development plans.

Course No.: Econ 4202	Credit: 4.0	Year: Fourth	Term: Second
Course Title: Thesis		**Course Status: Core**	

Rationale:

This course covers the application and synthesis of knowledge, acquired in the undergraduate program, with an emphasis on economic aspects in a broad sense. The student has to accomplish demarcated economic research by means of literature review and prove to have sufficient knowledge to critically analyze and summarize the chosen thesis topic. This course is designed to facilitate students' independent research, writing and presentation skills and to enable them to apply economic and/or statistical and econometric analysis to a selected topic in economics.

Course Objectives:

The aim of this course is to:

- Demonstrate students' ability to investigate and carry out research in their chosen area of economics.
- Obtain and map economic theory into coherent explanations of real-world problems.
- Explore and learn how to confront economic theory with real-world data.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Identify relevant economic knowledge, concepts, methodologies and skills, and apply those appropriately to analyze and solve current real world issues.
- Demonstrate the ability to evaluate and synthesize research-based and scholarly literature.
- Develop an adequate research methodology and be able to formulate and test concepts and hypotheses to analyze and interpret data.
- Present research findings in an organized, compelling, concise form and interpret results to give recommendations, where appropriate.
- Work individually and independently to accomplish a research successfully.
- Argue and communicate the important research outcomes, both in writing and orally, to economists and non-economists.

Course Content
This course requires the students to submit an in-depth thesis paper on a selected topic having relevance to economic issues/problems under the guidance of supervisor(s). Students who have completed **Econ 4102: Thesis Proposal** will be allowed to take this course. The students will normally continue their research work of **Econ 4102: Thesis Proposal** in this **Econ 4202: Thesis** course with the aim of submitting a quality thesis at the end of the term.

Course No.: Econ 4203	Credit: 3.0	Year: Fourth	Term: Second
Course Title: Econometrics II		Course Status: Optional	

Rationale:
Econ 4203 is basically an applied econometrics course, covering a rigorous analytical approach and some practical examples, provided for a better understanding of models, together with the help of econometric packages. The use of econometric tools in analysis for decision-making of the effects of certain policies will be focused in this course. The interpretation of result and formulation of conclusions will be given more emphasis in this course.

Course Objectives:
The aim of this course is to:
- Familiarize students with the methodology of designing an econometric research.
- Enlighten students with the effects of violating the assumptions of an econometric model and its remedial measures.
- Enhance students' ability to work on time-series, panel and micro-econometric techniques required for both micro and macroeconomics.

Intended Learning Outcomes (ILOs):
At the end of this course students will be able to:
- Deal with the econometric terminology, important estimation, identifying assumptions and test procedures of the models.
- Apply concepts and techniques of econometrics in the analysis of micro and macroeconomic relationships.
- Check policy relevant effects using cross-sectional, panel and time-series data.
- Estimate models and test their validity using dataset of relevant variables and suitable software.
- Interpret project reports and journal articles that make use of the concepts and methods that are introduced in the course.

Course Content
Section – A

Introduction: Concepts of - data, measurement scale, hypothesis testing, confidence interval; Single versus multiple regression; OLS approach, Methodology of Econometric Research: Statement; Model specification; Data; Estimation of the model; Hypothesis testing; Evaluation of the parameter estimates; Evaluation of the forecasting power of the model; Forecasting; Desirable properties of an econometric model.

Identification Problem: Notation and definition, problem, rules for identification; Tests of simultaneity; Exogeneity.

Simultaneous Equation Methods: Nature of Simultaneous Equation Models (SEM), reasons for use, empirical application, approaches; Recursive models and OLS; Estimation of just identified equation, estimation of over identified equation-2SLS method, 3SLS method.

Dummy Variable Regression Model: Definition of dummy variable; Dummy variable in econometric model; Dummy variable trap; Dummy variable regression with more than one qualitative regressors; Dummy variable regression with a mixture of quantitative and qualitative regressors; Testing for structural stability of regression model–Dummy variable approach; Interaction effects using dummy variable; Use of dummy variable in seasonal analysis and in combining time series and cross section data; Interpretation of dummy variable regression results.

Section – B

Qualitative Response Regression Models: Nature of qualitative response models (QRM); Linear probability model (LPM), application of LPM; Logit model, estimation techniques of logit model; Probit model, estimation techniques of probit model; Tobit model, estimation techniques of tobit model; Poisson regression model, estimation techniques of Poisson model.

Panel Data Regression Models: Concept, examples, Pooled OLS regression, fixed effects least squares dummy variables (LSDV) model, fixed effects within group estimator, random effect model, FE vs. RE, Hausman test, LR test.

Time-Series Regression Models: Concept, examples, stochastic process, spurious regression, tests of stationarity, unit root tests, cointegration tests, ARMA models, ARCH and GARC models, VAR models, VECM models, SVAR models.

Course No.: Econ 4204	Credit: 2.0	Year: Fourth	Term: Second
Course Title: Sessional on Econometrics II		**Course Status: Optional**	

Rationale:

Students will be taught beyond simple and multiple regressions into time-series econometrics, panel data analysis and probabilistic regression models in this course. Students will develop empirical models and acquire the skills to analyze high-frequency data, panel data and qualitative response data, thus providing them with useful analytical tools to carry out empirical work in their professional life. This course introduces the statistical techniques through hands-on practices, providing students with further knowledge and experience in conducting research in economics and business.

Course Objectives:

The aim of this course is to:

- Engage students with preparing a complete dataset and develop expertise on analysis of cross-sectional, panel and time series data.
- Involve students to test different assumptions for different dataset and adopt the corresponding remedial measures.
- Develop skills of estimating models for obtaining specific objectives.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Formulate appropriate econometric models and test for a particular analytical problem for business and financial analysis and decision making.
- Understand the applications of stationarity, single and multivariate cointegration and error correction techniques to time-series data.
- Demonstrate endogeneity and measurement errors in variable and limitations of statistical inference.
- Apply qualitative response regression models e.g. logit, probit, tobit, Poisson.
- Understand fixed and random effect estimations of panel data sets.
- Analyze and interpret the validity of modern regression techniques.

Course Content

This sessional course will be primarily based on Course No. **Econ 4203: Econometrics II**. Apart from other aspects, the course will cover exercise on the followings:

Applications of Qualitative Response Regression Models: Linear probability model (LPM), logit model, estimation techniques of logit model, probit model, estimation techniques of probit model, tobit model, estimation techniques of tobit model, Poisson regression model, estimation techniques of Poisson model.

Applications of Panel Data Regression Models: Concept, examples, Pooled OLS regression, fixed effects least squares dummy variables (LSDV) model, fixed effects within group estimator, random effect model, FE vs. RE, Hausman test, LR test.

Applications of Time-Series Regression Models: Concept, examples, stochastic process, spurious regression, tests of stationarity, unit root tests, cointegration tests, ARMA models, ARCH and GARC models, VAR models, VECM models, SVAR models.

Course No.: Econ 4205	**Credit: 3.0**	**Year: Fourth**	**Term: Second**
Course Title: Transport Economics		**Course Status: Optional**	

Rationale:

To deal with the severe problem of traffic jam and to establish a proper network of transport service in Bangladesh in the most cost effective way, the knowledge of transport economics is indispensable. Accordingly, this course analyzes transport demand-supply, means of transportation, problem and management of transportation.

Course Objectives:

The aim of this course is to:

- Analyze the pros and cons of consumers' transport demand and supply.
- Evaluate the mechanism of internalization of external cost from private and social dimension.
- Reveal the synchronization between transport management and public and private sector transport supplier.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Build up transport demand function, estimate transport demand, and calculate transport demand elasticity.
- Estimate the optimum social welfare considering the nexus between marginal social benefit and marginal social cost of establishment of transport network.
- Critically evaluate the transport management policies.

Course Content
Section – A

Introduction: Definition, scope and principles of transport economics; Global issues in transport; Characteristics and elements of transport; Factors affecting transport development; Stages of transport development; Determining factors of transportation system; Drawbacks of transport; Link between mobility and affluence.

Transport Demand: Factors affecting transport demand; Concept of elasticity of transport demand; Effects of own price elasticity; Effects of cross price elasticity; Solution to peak demand problem; Consumers' dilemma in choosing transport; Trends and structural change; User choice.

Transport Supply: Factors affecting transport supply; Excess supply of transport; Concept and measurement of elasticity of transport supply; Economic significance of the concept; Rules and methods of transport pricing; Direct and indirect methods of pricing.

Problems of Transportation: Concept of congestion; Causes of congestion and measures to overcome congestion; Congestion cost – internal cost and external cost; Concept of urban sprawl; Link between urban sprawl and transportation development; Link between urban sprawl and congestion; Effect of land use travel pattern.

Section – B

Road Transport: Characteristics and elements of road transport; Classification of roads; Maintenance of roads; Road transport and externalities; Economic, political and social significance of road; Road space rationing; Problems of railway transportation system; International routes of railways.

Water Transport: Nature and significance of water transport; Classification of water transport; Lake transport; Renowned canals of the world; Possibilities and opportunities of water transport; Problems of water transport; Development of shipping in Asia, Europe and the USA; Competition in shipping; Causes of competition; Shipping conference; Differences between tramp and liner; Economics of short sea shipping.

Air Transport: Economics of air transport; Types of air transport; Characteristics of air transport; Elements of air transport; Famous airports of the world; Problems of air transportation system.

Transport Management: Definition of transport management; Policies for traffic management and parking management; Principles of traffic signs; Types of traffic sign; Informatory sign; Warning sign; Mandatory sign and prohibitory sign; Advantages and disadvantages of one way street system.

State vis-à-vis Private Sector: Role of state in development and management of transport sector; Concept and scope of privatization of the transport sector; Different forms of privatization in transport sector; Factors behind privatization of the transport sector; Concept of public-private-partnership (PPP) in transport sector.

Course No.: Econ 4207	Credit: 3.0	Year: Fourth	Term: Second
Course Title: Economics of Disaster Management		**Course Status: Optional**	

Rationale:

Bangladesh suffers from different types of natural disasters. Sometimes the impact of the natural disaster is so intensive that it takes years to recover. Such disasters have numerous direct and indirect effects on the economy both in the short and long run. Therefore, a course to address disaster management from economic viewpoint is inevitable. This course broadly focuses on economic tools, concepts and instruments to address disaster management.

Course Objectives:

The aim of this course is to:

- Inform students about different patterns of disaster and its ultimate effect.
- Allow students to analyze about how it is possible to cope up with disaster.
- Introduce students with different strategies and policies about disaster management and risk reduction.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Analyze causes and consequences of disasters.
- Understand basic concepts of disaster risk reduction and apply tools and techniques of risk reduction to analyze disaster preparedness and mitigation strategies.
- Evaluate the policies and its after math on life of vulnerable community.

Course Content

Section – A

Basic Concepts of Disaster: Basic concepts of disaster preparedness, rescue, relief, rehabilitation and reconstruction; Natural hazards; Human-induced hazards; Industrial hazards; Distinction between hazard and disaster; Hazard vulnerability.

Major Disasters: Cyclone storm, flood, tidal surge, draught, earthquake, riverbank erosion, landslide, fire, famine, epidemic; Social, economic and psychological impact of disaster; Risk assessment of various disasters.

Disaster Risk Reduction: Principles and practices; Disaster preparedness; Emergency response; Losses, relief and economic considerations of disaster; Need assessment; Indigenous coping mechanism.

Disaster Risk Management: Risk management strategies; Preventive and mitigating actions; Risk insurance; Long-term recovery, rehabilitation and reconstruction; Post-disaster trauma management; Risk communication, training and public awareness.

Relief Approaches: Meaning and importance of relief; Media for immediate relief; Short-term and long-term social rehabilitation approach; Limitation of relief work.

Section – B

Economic Estimation of Disaster: Estimating disaster relating to life and properties; Costs and benefits of disaster mitigation options; Net damage and abatement cost estimation; Disaster risk and inequality; Cross-sector linkages.

Mitigating Impact of Disaster: Managing immediate relief operation for programs – safe drinking water supply, salinity control, sanitary facilities, essential supplies, fuel and cooking facilities, primary health care, communication facilities.

Disaster Planning and Management: National, regional, community, household and individual level development planning; Regulatory and institutional framework for disaster planning and management in Bangladesh; National Disaster Policy; GO-NGO collaboration and activities to disaster mitigation and preparedness; Disaster Pressure and Release (PAR) Model; DPSIR.

Community Based Approaches to Disaster Management: Participatory methods; Community mobilization; Facilitating self-help initiatives; Sustaining long-term community based disaster management.

Disaster and Development: Linkages between disasters and development; Impact of disasters on development; Disaster-development continuum; Cause-effect relationship between development planning and disasters; Local, national and global perspective of disaster and development.

Course No.: Econ 4209	Credit: 3.0	Year: Fourth	Term: Second
Course Title: International Finance		**Course Status: Core**	

Rationale:

This course will equip students with knowledge required for managing international flow of funds, exchange rate and macroeconomic balance in an open economy. With the pace of globalization, an international dealing is common phenomenon where this course prepares students by providing knowledge in that perspective.

Course Objectives:

The aim of this course is to:

- Introduce the concepts of international financial market to get idea about international flow of fund.
- Identify the determinants and influence of exchange rate fluctuation in cross country trade.
- Explore the role of international financial institutions for augmenting trade and investment across the world.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Demonstrate reasons and benefits of multinational operation.
- Understand internal trade and capital flow.
- Perceive participants and options of investment in international financial market.
- Identify reasons, systems and effect of exchange rate fluctuation in international trade and investment.
- Understand and analyze exchange rate and purchasing power parity.

Course Content
Section – A

International Flow of Funds: Balance of payments; International trade flows; Factors affecting international trade flows; International trade issues; Correcting a balance-of-trade deficit; International capital flows; Agencies that facilitate international flows; Effects of trade on MNC's Value.

International Financial Market: Foreign exchange market; International capital market; International money market; International credit

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market; International bond market; International stock markets.

Exchange Rate Determination: Measuring exchange rate movements; Exchange rate equilibrium; Factors that influence exchange rates; Anticipation of exchange rate movements.

Government Influence on Exchange Rate: Exchange rate system – fixed exchange rate system, freely floating exchange rate system, managed floating exchange rate system, pegged exchange rate system; Dollarization; Classification of exchange rate arrangements; Government intervention – reasons for government intervention, direct and indirect interventions.

Multinational Financial Management: Managing an MNC; Reasons behind pursuing international business; Ways of engaging international business; Valuation model for an MNC.

Section – B

Currency Derivatives: Forward market; Currency futures market; Currency options market; Currency call options; Currency put options; Conditional currency options.

International Arbitrage and Interest Rate Parity: International arbitrage; Types of international arbitrage; Comparison of arbitrage effects; Interest Rate Parity (IRP) - derivation of IRP; Determining the forward premium.

Relationships among Inflation, Interest Rates and Exchange Rates: Purchasing Power Parity (PPP): International Fisher Effect (IFE); Comparison among IRP, PPP and IFE.

Open Economy Macroeconomics: National income accounting for an open economy; The balance of payment accounts; Macroeconomic policy goals in an open economy – Internal balance: full employment and price-level stability, External balance: the optimal level of the current account.

International Financial Institutions: Functions and conditionality of World Bank group - International Bank for Reconstruction and Development, International Development Association, International Finance Corporation; Multilateral Investment Guarantee Agency; International Monetary Fund; Asian Development Bank.

Course No.: Econ 4211	Credit: 3.0	Year: Fourth	Term: Second
Course Title: Globalization and International Cooperation		**Course Status: Core**	

Rationale:
The process of globalization has aroused great controversy. This course examines the reasons for the integration across borders of the markets in goods and the factors of production, and the corresponding consequences of these trends. This course will facilitate to conduct surveys on various institutions and mechanisms that contribute to the dynamics of international cooperation within selected policy areas.

Course Objectives:
The aim of this course is to:
- Enable the students to examine globalization, its many facets, complexities, paradoxes, controversies, and effects.
- Realize how the conditions and limits of international cooperation can be understood through theoretically informed investigation.
- Acquire working knowledge of a number of arenas in which international cooperation does (or does not) take place, including military, economic and social policy.

Intended Learning Outcomes (ILOs):
At the end of this course students will be able to:
- Demonstrate the basic concept, diverse interpretation, benefits and harms of globalization.
- Identify the primary institutions and policies that promote economic globalization.
- Demonstrate the ideology of market fundamentalism that undergirds the current system and to compare it with the values of faith traditions.
- Explore economic relationships and conflicting rights between consumers and producers, private owners and the commons, corporations and individual persons.
- Develop action strategies for individuals and congregations to respond to the challenges of economic globalization.
- Analyze major ideologies, historical processes and contemporary challenges in international cooperation and in global economy.

Course Content
Section – A

Globalization: Meaning of globalization; Globalization – a challenge or a wave for the third world countries; Dimension of globalization; Beneficiaries of globalization; Concept of trade openness; Costs and benefits of trade openness; Historical economic process of globalization.

WTO and Bangladesh Trade Policy: Importance of trade issues for Bangladesh; Importance of international trade and multilateral trading system; Evolution of multilateral trading system – from GATT to WTO; Overview of GATT/WTO principles and rule based regime; Trade negotiation; Agreement on Agriculture (AoA); Non-Agricultural Market Access (NAMA); General Agreement on Trade in Services (GATS); WTO and Regional Trade Agreements (RTAs); Development dimension of WTO and aid for trade.

Socioeconomic Issues Related to Globalization: Role of transnational corporations; Growing inequality; Persistent mass poverty and hunger; Transit and Transshipment – meaning and difference.

Global Institutions: Brief history of Bretton Woods Institution; Role of IMF and World Bank in Latin America, East Asia and South Asia; Impact of policies on these regions.

Section – B

Towards Humane Globalization: Enhancement of integration; Improvement in economic management, poverty reduction, acceleration of human development.

Globalization and South Asia: Globalization in South Asia; Impact of Globalization on economic growth, agricultural and industrial growth; Income distribution, poverty, human development, education, health and employment in countries like India, Pakistan, Bangladesh, Nepal, Sri Lanka.

Trade and Financial Globalization: Trade integration; Financial integration; Resource outflow and inflow; Foreign direct investment.

Lessons and Issues: Civil society and private sector intervention; Global and national imperatives.

Course No.: Econ 4212	Credit: 1	Year: Fourth	Term: Second
Course Title: Comprehensive Viva Voce		Course Status: Core	

Rationale:

The syllabus for attaining degree in BSS (Hons) in Economics Program has been designed in order to equip a student with both theoretical and practical knowledge in related fields. While, written exam for theory courses and other types of assessments for sessional/fieldwork based courses are in operation to evaluate students' performance; need for devising a mechanism for overall assessment has always been earnestly felt. This course has been included to serve that purpose.

Course Objectives:

The aim of this course is to:

- Judge the overall development of the student during the BSS(Hons) in Economics program

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Have a systematic understanding of Economics and other related branches of knowledge, which includes a critical awareness of current problems and/or new insights.
- Have a comprehensive understanding of tools and techniques applicable to the practical field of economics.
- Argue and communicate the important issues of economics orally to economists and non-economists.
- Advance their knowledge and understanding to a high level.

Course Content

Content of all taught courses.

Course No.: URP 4251	Credit: 3.0	Year: Fourth	Term: Second
Course Title: Geographical Information System		Course Status: Optional	

Rationale:

The course is designed to provide students with a theoretical understanding of spatial data and analysis concepts, and introduce the practical tools needed to create and manage spatial data, perform spatial analysis, and communicate results using a well-designed map.

Course Objectives:

The aim of this course is to:

- Introduce the basic principles of Geographic Information System (GIS), remote sensing and its uses in economics.
- Understand spatial data collection and analysis methods as well as map out of spatial and non-spatial data using GIS software.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Understand the basic concepts of GIS and remote sensing and apply those in a variety of fields e.g. economics, agriculture, ecological modeling, urban planning, utility management, land use management, military, real estate, emergency management etc.
- Develop skills of using, manipulating and interpreting spatial data.
- Apply cartographic principles of scale, resolution, projection and data management to a problem of a geographic nature.
- Make them aware of the underlying theory of spatial information science.
- Understand Global Positioning Systems and Remote Sensing and understand how they are allied with GIS.
- Formulate new functions and apply what they have learned to their own research.

Course Content
Section – A

Introduction: Definition, history and components of Geographic Information System (GIS); Geographic Information Systems; GI Science and GI Studies.

Spatial Data: Maps and their influence on the character of spatial data-purpose; Scale; Features; Representation; Generalize; Map projection; Geo-referencing; Thematic characteristics of spatial data; Other sources of spatial data.

Spatial Data Modeling: Entity definition; Spatial data models; Spatial data structures; Vector model versus Raster model of data; Modeling surfaces - TIN; DTM.

GIS Data Collection: Primary geographic data capture; Secondary geographic data capture; Obtaining data from external sources; Capturing attribute data.

Section – B

Data Input and Editing: Methods of data input – Keyboard entry; Manual digitizing or board digitizing; Automatic digitizing or onscreen digitizing; Electronic data transfer; Data editing – detecting and correcting errors; Re-projection, transformation and generalization; Edge matching and rubber sheeting; Geo-coding address data.

Data Analysis and Modeling: Queries; Measurements, reclassification, buffering and neighborhood functions; Map overlay; Spatial interpolation; Analysis of surfaces, Network analysis; Modeling physical and environmental process; Modeling human process; Modeling decision making process.

Data Quality and Data Input: Data quality and errors; Sources of errors in GIS; Finding and modeling errors in GIS; Managing GIS errors; Maps as output; Spatial multimedia, Non-cartographic output, GIS and spatial decision support system.

GIS Project Design and Management: Problem identification; Designing a data model; Project management; Implementation problems; Justifying investment in GIS; Project evaluation .

GIS Applications: GIS applications in economic development, social and anthropological science.

Course No.: URP 4252	Credit: 1.5	Year: Fourth	Term: Second
Course Title: Geographical Information System – Lab.		**Course Status: Optional**	

Rationale:

This sessional course is primarily based on Course No. "URP 4251: Geographical Information System" and made of two components: lectures and labs. In the lectures, the conceptual elements of the GIS will be discussed. The labs are designed in such a way that students will gain first-hand experience in data input, data management, data analysis, and result presentation in a geographical information system.

Course Objectives:

The aim of this course is to:

- Understand the basic structures, concepts, and theories of GIS.
- Gain a hand-on experience with a variety of GIS operations.
- Use GIS in economic research.

Intended Learning Outcomes (ILOs):

At the end of this course students will be able to:

- Understand how to select a location on the surface of the Earth, and why it is so important to mapping and creating a 2D map of a 3D world.
- Create, edit, and join tables, and explore and classify attribute data for mapping.
- Make an effective map from quantitative data.
- Select data based on location or values in a table, tasks often performed when making a map.
- Use Model Builder to create and then execute a sequence of GIS tools to document, automate, and share work.
- Find map data online and use metadata to assess its value and keep up with the latest trends in the field.

Course Content

- Spatial Data
- Spatial Data Modeling
- GIS Data Collection
- Data Input and Editing
- Data Analysis and Modeling
- Data Quality and Data Input GIS Project Design and Management
- GIS Applications

7. Teaching Strategy:

7.1 Teaching Strategy of Theory Courses: Typical strategies are class lecture, group discussion, cooperative learning (small groups work together for achieving common goal), field visit, lecturing of expert/guest speaker(s) on selective issues, etc.

7.2 Teaching strategy of sessional courses: Typical strategies are class lecture, group discussion, cooperative learning (small groups work together for achieving common goal), field visit, sessional tour, lecturing of expert/guest speaker(s) on selective issues, etc.

8. Assessment Strategy and Related Information:

8.1 Number and Duration of Term

There will be two terms (I and II) in an academic year. Duration of each term will be 21 weeks, which will be distributed as follows:

Classes	13 weeks
Preparatory Leave before Final Examination	02 weeks
Final Examination	04 weeks
Term Break	02 weeks
Total	**21 weeks**

8.2 Course Pattern and Structure

Undergraduate program will consist of a set of theoretical and sessional (laboratory/fieldwork/thesis/project/internship, etc.) courses.

8.2.1 Assignment of Credit Hours

a) Theoretical Courses

One lecture of 50 minutes a week will be equivalent to one credit hour.

b) Sessional Courses

One sessional class of 50 minutes a week will be equivalent to half credit hour.

8.3 Course Type

The courses included in undergraduate curriculum are divided into two groups as follows:

8.3.1 Core Courses

In each Discipline a number of courses will be offered as core courses, which are mandatory for awarding degree.

8.3.2 Optional Courses

Apart from the core courses, students will have to complete a number of courses which will be offered as optional courses.

8.4 Course Offering

Courses to be offered in a particular term will be announced and published in the course curriculum along with a tentative term schedule before the end of the previous term. Whether a course is to be offered in any term will be decided by the respective Discipline.

8.5 Admission of Students

(a) For the First Year students, Discipline-wise course registration is mandatory. Course registration will be carried out on the basis of the advice of the Course Coordinator and consent of the Discipline Head.

(b) First year first term students **must register** for the courses within the deadline of course registration decided by the concerned School, otherwise, his/her admission will stand cancelled. **No admission** will be allowed after fifteen working days from the beginning of the classes.

8.6 Registration Procedure

Each student will fill in the course registration form in consultation with the Course Coordinator under the guidance of the Discipline Head. The original copy of the course registration form will have to be submitted to the Registrar's Office. The Registrar's Office will be responsible for its distribution to relevant authorities (Disciplines and The Controller of Examinations etc.). Course **registration** is to be completed within five working days from the beginning of each term. However, **late registration** will be permitted up to next five working days on payment of late registration fees. Students having dues to the University or Hall of residence shall not be permitted to register.

8.6.1 Limits on Credit Hours to be taken in a Term

A student must register for at least 15 credit hours and may be allowed to register for up to a maximum of 25 credit hours, if recommended by Discipline Head. **If any student fails to register, in any way, for minimum credit hours (15 credit hours), his/her studentship at the University will stand cancelled.** The minimum limit may be relaxed beyond the regular eight terms for the students having fewer than 15 credit hours required to obtain his/her graduation.

8.6.2 Course Adjustment Procedure

A student will have some limited options to add or drop courses from his/her registration list, within fifteen working days from the beginning of classes. This can be done with the advice of the concerned Course Coordinator and with the consent of the Discipline Head. Adjustment of initially registered courses in any term can be done by duly filling in the adjustment form. The Registrar's Office will do the needful.

8.6.3 Withdrawal from a Term

If any student is unable to complete the term final examination due to serious illness or serious accident, he/she may apply to the Head of the concerned Discipline for total withdrawal from the term within eight working days after the end of the term final examination. However, he/she may choose not to withdraw any sessional course if the grade obtained in such a course is C or better. Medical certificate endorsed by the Chief Medical Officer of the University must support the application. The Dean of the concerned School will take the decision on such an application and inform the Registrar. If a student is allowed to withdraw from a term, he/she will have to register from the term he/she has withdrawn. However, he/she may be allowed to register for backlog courses, if offered.

8.6.4 Registration for Subsequent Terms

(a) Students who have passed all the courses prescribed for the term and have no backlog of courses will be eligible to register for all courses prescribed for the next term. Other students have to register for the backlog courses plus the courses prescribed for the next term, subject to the limits set in **Article 8.6.1.**

(b) When a student is going to register for his/her courses in 3rd Year 2nd Term, his/her earned credit hours up to 2nd Year 2nd Term must be at least 36. **Otherwise, his/her studentship at the University will stand cancelled.**

(c) Special Term: A special term will be conducted for final year students only with retake of up to three courses but it will not exceed 15 credit hours. This will be non-taught term to clear retake courses, if any. Examination of special term will start 4 (four) weeks after the publication of 4th Year 2nd Term results and will continue not more than 2 (two) weeks. Continuous assessment marks (40%) will be carried over from previously registered theory course(s) and special term final examination will carry the remaining (60%) marks (ref. Article 8.8.2). Supervisor(s) in consultation with the Head may allow the student(s) to re-submit final year term thesis or core sessional(s) within the special term schedule. However, it must be within the allowed limits of the special term credits.

(d) Internship program/research study will be conducted according to the course curriculum of the respective Disciplines.

8.7 Absence during a Term

A student should not be absent from quizzes/class tests/field work etc. during the term. Such absence will naturally lead to reduction in points/marks, which count toward the final grade. **Absence in Term Final Examination will result in F Grade.**

A student who has been absent for a short period, up to a maximum of three weeks due to illness, should approach the course teacher(s) or Course Coordinator(s) for a make-up of quizzes/class tests or assignments etc. immediately on returning to the classes. Such request should be supported by a medical certificate endorsed by the Chief Medical Officer of the University. Medical certificate issued by a registered medical practitioner (with the registration number shown explicitly on the certificate) and endorsed by the Chief Medical Officer of the University will also be acceptable only in those cases where the students has valid reasons for his absence from the University.

8.8 Grading System

Total performance of a student in a given theoretical course is based on a scheme of continuous assessment made through a set of quizzes/class tests, class attendance and participation, homework

assignments, and a Term Final Examination. The assessment in sessional courses is made through observation of the student at work in class/field work, viva-voce during laboratory hours and quizzes. Letter grade with a specified number of grade points is awarded in each course for which a student has registered. A student's performance is measured by the number of credits that he/she has completed satisfactorily and the weighted average of the grade point is required to be maintained for satisfactory progress. Similarly, a minimum number of earned credits should be acquired in order to qualify for the degree as prescribed in Article 13.

8.8.1 Grading Scale

Letter Grades and corresponding Grade Points will be awarded in accordance with provision shown below:

Numerical Grade	Letter Grade	Grade Point
80% or above	A^+ (A plus)	4.00
75% to less than 80%	A (A regular)	3.75
70% to less than 75%	A^- (A minus)	3.50
65% to less than 70%	B^+ (B plus)	3.25
60% to less than 65%	B (B regular)	3.00
55% to less than 60%	B^- (B minus)	2.75
50% to less than 55%	C^+ (C plus)	2.50
45% to less than 50%	C (C regular)	2.25
40% to less than 45%	D	2.00
Less than 40%	F	0.00
Incomplete	I	
Withdrawn	W	
Continuation (For project and thesis/design course)		

8.8.2 Distribution of Marks

Forty percent (40%) of marks shall be allotted to continuous assessment, i.e., quizzes and homework assignment, class attendance and class participation. Remaining marks will be allotted to term final examination, which will be conducted centrally by the University. There will be two examiners for each theoretical course in the term final examination, which will be of three hours duration.

The distribution of marks for given theory courses will be as follows:

No.	Description	Marks
(i)	Class Participation	10
(ii)	Continuous assessment: Homework/ assignment(s)/term paper/quizzes/class tests/ presentation/open book examination, etc.*	30
(iii)	Final Examination**	60
	Total	**100**

*Marks of continuous assessment will be arranged according to following table:

No. of credit of the course	Total no. of assessments required	No. of best assessments to be considered
2	3	2
3	3	2
4	4	3

At least one class test will be taken from each section. But if there is only one class test in one section, that single test will be counted as the section best. Duration of a class test will be 20-45 minutes and it will preferably be taken during class hour. Each of the continuous assessment will finally carry equal marks or weightage. Answer script of the assessment may be shown to the student, but it would not be returned to them. The concerned teacher would submit the evaluated answer-scripts and attendance register to the head of the Discipline.

** Term final examination is a written examination comprising 60 (sixty) mark equally divided between **two sections**. It will be conducted centrally by the University. There will be two examiners for each theoretical course in the Term Final Examination, which will be of **three** hours duration.

The distribution of marks for a given sessional course will be as follows:

No.	Description	Marks
(i)	Class Participation/contact with teacher	10
(ii)	Sessional assessment: Observation of the student in class/field work/viva-voce during laboratory hours/quizzes/assignments/reports/ presentation /open book examination, etc.	60
(iii)	Final Jury/Viva-voce	30

	Total	**100**

In a similar manner, the distribution of marks for Thesis Proposal/Thesis course will be as follows:

No.	Description	Marks
(i)	Contact/Discussion/Communication with the supervisor(s)	10
(ii)	Evaluation	60
(iii)	Viva-voce/Defense	30
	Total	**100**

There will be two examiners (one is Supervisor) to examine the thesis. Each examiner will evaluate the thesis separately and the average marks will be considered for grading. However, if the marks given by the first and second examiners vary by 20% or more, a third examiner to be appointed by the concerned Examination Committee from outside of the University will evaluate the thesis paper. Among these numbers, average of the closest two numbers will be considered for grading. However, if the marks given by the third examiner happen to stand at the middle of the marks given by the first two examiners, the average of the three marks will be considered for grading.

Basis for awarding marks for class attendance and participation will be as follows:

Attendance & Participation	Marks
90% and above	10
85% to less than 90%	09
80% to less than 85%	08
75% to less than 80%	07
70% to less than 75%	06
65% to less than 70%	05
60% to less than 65%	04
Less than 60%	00

8.9 Earned Credits

The courses in which a student obtains D or a higher grade will only be counted as credit earned by him/her.

If a student obtains F grade in any core course in any term, he/she will have to repeat the course. In case of F grade in an optional course, he/she may choose to take a substitute course, if available.

8.9.1 Regular Grading

F grade will not be counted for Grade Point Average (GPA) calculation but will be shown on the grade sheet. When a student will repeat a course in which he/she previously obtained F grade, he/she will be given just immediate lower grade that he/she obtained in the repeated course. But in case he/she obtains D grade that will be maintained and this grade will be shown in the transcript. If a student has to repeat a course due to punishment on him/her, the grade obtained will be maintained. If a student obtains a grade other than F in a course, he/she will not be allowed to repeat the course for the purpose of grade improvement.

8.9.2 Repetition of Course(s)

If a student repeats a course for which he obtained F grade (in any previous term), he may be allowed to repeat the continuous assessment (i.e., class test/quiz/assignment/term paper) to improve the grade, but he/she has to apply to the Head through concerned course teacher within 20 working days from the beginning of the Term. However, the marks of class attendance and participation will be taken from the previous record.

8.10 Calculation of GPA

Grade Point Average (GPA) is the weighted average of Grade Points obtained in all the courses passed/completed by a student. For example, if a student has passed/completed five courses in a term having credits of C_1, C_2, C_3, C_4 and C_5, and his/her points in these courses are G_1, G_2, G_3, G_4 and G_5 respectively then,

$$\text{GPA} = \frac{\sum C_i G_i}{\sum C_i}$$

A Numerical Example

Suppose a student has completed five courses in a term and obtained the following grades:

Course	Credit	Grade	Grade Point
Econ 1101	3	A^+	4.00
Econ 1103	3	B	3.00
Econ 1104	3	A	3.75
Econ 1105	2	B^+	3.25
Soc 1151	1	A^-	3.50

Then his/her GPA for the term will be computed as follows:

$$\mathbf{GPA} = \frac{\mathbf{3(4.0) + 3(3.0) + 3(3.75) + 3(3.25) + 1(3.50)}}{\mathbf{3 + 3 + 3 + 2 + 1}} = \mathbf{3.52}$$

8.11 Performance Evaluation

The performance of a student will be evaluated in terms of three indices, viz., Term Grade Point Average (TGPA), Yearly Grade Point Average (YGPA) and Cumulative Grade Point Average (CGPA). The TGPA is computed by dividing the total grade points earned in a Term by the number of credit hours taken in the Term. The YGPA is computed by dividing the total grade points earned in two Terms in a year by the number of credit hours taken in that year. The CGPA is computed by dividing the total grade points accumulated up to date by the total completed credits. Thus a student who has earned 275 grade points in attempting 100 credit hours of courses would have an overall CGPA of 2.75.

8.12 Degree with Distinction

The students will be awarded the degree with distinction, if their CGPA is 3.75 or above.

8.13 Minimum Earned Credits and GPA Requirements for Obtaining Degree

Students must complete their studies within 7 (seven) years in 4-year program and 8 (eight) years in 5-year program to obtain their degree. Credit hour requirement for awarding of Bachelor (Hons) Degree in 4-year and 5-year programs will be decided by the respective Curriculum Committee.

Minimum earned credit hours required for awarding degree is 148 and the minimum CGPA requirement for obtaining Bachelor (Hons) degree is 2.20.

A student may take additional courses with the consent of Discipline Head in order to raise GPA. But he/she may take a maximum of 15 such additional credits in 4-year program, beyond respective credit hour requirements for Bachelor (Hons) Degree during his/her entire period of study.