NATIONAL UNIVERSITY

Syllabus

Department of Economics

Four Year B.S.S Honours Course

Effective from the Session: 2009–2010

National University
Syllabus for Four Year B.S.S. Honours Course
Subject : Economics
Session : 2009-2010
Second Year Syllabus

Subject Code	Subject Title	Marks	Credits
2262	Intermediate Microeconomics.	**100**	**4**
2263	Mathematical Economics	**100**	**4**
2264	Business, Finance and Accounting (In English/Bengali)	**100**	**4**
7420	Computer & Information Technology	**100**	**4**
7192 7203 7211	Political Organization and Political System of UK and USA Or, Sociology of Bangladesh Or Bangladesh Society and Culture	**100**	**4**
2296	Viva-voce + Term Paper (50+50)	**(50+50)=100**	**(2+2)=4**
	Total=	**600**	**24**
9999	English (Compulsory)	100	Non-Credit

Detailed Syllabus

Course Code	2262	Marks: 100	Credits: 4	Class Hours: 60
Course Title:	**Intermediate Microeconomics**			Exam Duration: 4 Hours

Course Contents:

1. **Theory of Consumer Behavior (Consumer preferences, Budget constraints and consumer choices):** Utility (Cardinal and Ordinal Utility, Marginal utility and law of diminishing marginal utility), Axioms of consumer preferences (completeness, Reflexivity, Transitivity and Non-saturation), Indifference Curve (Properties, Indifference maps, Different shapes of indifference curve, Corner solutions, Utility functions), Budget equation and Budget line, Consumer's Equilibrium, Rotation and shift in budget line and changes in consumer equilibrium, Price effect, Income effect and Substitution effect, Separation of price effect into income and substitution effect for normal and inferior goods- Hicks and Slutsky's methods, Price consumption curve and derivation of demand curve, Income consumption curve and derivation of Engel curve, Marshallian or ordinary demand curve, Compensating or Hicksian demand curve, Derivation of Marshallian and Hicksian demand functions from the constraint utility maximization and cost minimization problems, Law of equi-marginal utility or utility per taka spent and consumer equilibrium. Application of indifference curve, Consumer surplus, Gains from trade and excess burden of tax etc., Superiority of indifference curve analysis and marginal utility analysis, Revealed preference theory.

2. **Theory of Production (Production technology, cost constraints and Input choices):** Production function, shortrun vs longrun, Production with one variable, average and marginal products, Law of diminishing returns, Stages of production, Iso-quants (Properties, Iso-quant maps, Input flexibility, different shapes of iso-quant), returns to scale, cost of production, opportunity cost, sunk costs, Fixed costs and variable costs, Fixed vs sunk costs, Marginal and average costs, user cost of capital, cost minimizing input choice, and Techniques of Production, Iso-cost line , Producer's equilibrium, Changes in Iso-cost line, Expansion path and longrun costs, Derivation of input demand and cost curve, ridge-lines and optimum economic region of production, Economies and diseconomies of scale, Economies and diseconomies of scope, Homogeneous, non-

homogeneous and linear homogeneous production functions, some special production functions, Cobb-Douglas and CES production functions, Euler's theorem adding up problem,

3. **Perfect and Imperfect Competition:**

   a) Short and long run equilibrium of firm and industry under perfect competition, Economic

   and normal profits, Profit maximization, Derivation of short and long run supply curve, elasticity of market supply, Economic rent, Returns to scale and shapes of the long run supply curve, Perfect competition, economic efficiency and welfare.

   b) Monopoly market, TR, AR, MR and elasticity of demand, Monopolist's Short and long run output decisions, rule of thumb for pricing, shift in demand, Effect of a tax, multiplant firm, monopoly power, Measuring monopoly power, sources of monopoly power, Elasticity of market demand, social costs of monopoly power, rent seeking, Price regulation, Supply curve under monopoly, Natural monopoly, Bilateral monopoly, Price discriminating monopoly, 1st, 2nd and 3rd degree price discrimination, Condition for profitable price discrimination, Monopoly and perfect competition compared, Monopsony, Monopoly and monopsony compared, Monopsonist's price and output decisions, Sources of monopsony power, Monopolistic competition-shortrun and longrun equilibrium, Monopolistic competition and economic effieiency.

4. **Factor market:** Factor market Vs. Product market, Demand for factor/ Derived demand, Basic concepts relating factor market, VMP MRP, AFC, MFC, Relationship between VMP and MRP under perfect competition and monopoly in the product market, Relationship between AFC and MFC under perfect competition and monopsony in the factor market, Employer's Equilibrium/determination of factor price and optimum use of factors and different structure of product and factor market, Bilateral monopoly again, Derivation of short and long run factors demand curve with or without internal effect, Backward bending labor supply curve, Labor exploitation, trade union.

5. **General and Partial Equilibrium:** The concept of equilibrium, Partial and general equilibrium, General equilibrium model, Walras-Cassel model, 2x2x2 Model, Stable and unstable equilibrium, Marshall and Walrasian view, Existence, uniqueness and stability of equilibrium, Comparative differences between general and partial Equilibrium.

6. **Welfare Economics:** Concept of welfare and its determinants, Pareto optimality assumption and marginal conditions, 2x2x2 Model, Pareto optimality under prefect and imperfect competition, Externalities and Pareto optimality, Indivisibility of commodity and Pareto optimality, Public goods and Pareto optimality, Pareto optimality and distribution of wealth, Efficiency Vs. equality, Pareto superior and Pareto non-comparable, Problem of indetermination of Pareto optimality, Social welfare function, Characteristics of social welfare indifference curve, Removal of indeterminateness-bliss point, Second best theorem, Arrow's Impossibility theorem, New welfare Economics, The principle of compensation, Kaldor-Hicks Scitovsky's criteria, Scitovsky's Paradox or reversal test, Double criterion, Pareto optimality and compensation principle compared.

Books Recommended:

1. Koutsoyiannis, **Modern Microeconomics.**
2. Lipsey, R. **Positive Economics**, Weidenfeld and Nicholson.
3. Michael Parkin, **Microeconomics,** (Latest edition), Pearson Education Inc. Latest Edition.
4. N. Gregory Mankiw, **Principles of Microeconomics,** (4/e), Thomson South-western Printed, 2007
5. Paul A. Samuelson & William D. Nordhaus, **Economics**, (18/e), Tata McGraw Hill Publishing Company ltd., 2005.
6. Robert S. Pyndick, Daniel L. Rubinfeld and Prem L. Mehta, Microeconomics, 7th edition.l

Course Code	2263	Marks: 100	Credits: 4	Class Hours: 60
Course Title:	Mathematical Economics			Exam Duration: 4 Hours

Course Contents:

1. **Linear Algebra:** Basic Operation of Matrix and vector-addition, Subtraction and multiplications; Rank of a matrix; Determinants; Non-singularity; Minors; C-factors; Ad joint matrix; Inverse matrix; Properties of Inverse matrix; Jacobian and Bordered Hessian determinants. Application of matrices in national income model and market model.
2. **Input-Output Analysis:** The main idea and assumptions of input-output model, Uses of technique of matrix, Leontief or Technology matrix, Hawkin's Simon Conditions, Samulson's Substitution theorem, Open and closed input-output model, indecomposable and decomposable input-output system.
3. **Dynamic and Integral Calculus:** Nature of Dynamic economics and integration; Rules and models of integration; Integration by substitution and by parts; Some economic application of integration; Marginal function to total function' investment and capital formation; Consumer and producer surplus.
4. **Differential Calculus:** First order linear differential equations; Homogenous and non homogenous solutions; Exact differential equations; Convergence of equilibrium; Dynamics of market price; Time path of price; Dynamic stability of equilibrium. Application of differential calculus in economics.
5. **Difference Calculus:** First order linear difference equations-Solutions: ...... method,time independent method and general solution. Dynamic stability of equilibrium; Convergence to equilibrium: Comments on stabilityor on the nature of time path. Application of difference calculus in economics; Cobb-web market model ' A market model with inventory, Lagged income model determination.
6. **Optimization:** Maximiztion and minimiztion, Derivation and necessary and sufficient conditions, constrained and unconstrained optimization; Economic Applications.
7. **Linear Programming:** Elements and assumptions of linear programming, Formulating a linear programming problem; geometric interpretation of slack variables, feasible and basic solutions; Graphical and simplex method solution of maximization and minimization problems Graphical and Simplex method of solution, Duality and Duality's theorem, Rules of transformation, Economic interpretation and significance of duality theorem.

Books Recommended:
1. Alpha C. Chiang and Kevin Wainwright, **Fundamental Methods of Mathematical Economics**, McGraw Hill, 5th Edition.
2. Michael Hoy, John Livernois, Chris McKenna, Ray Rees and Thanasis Stengos, **Mathematics for Economists**, The MIT Press.
3. Earl K. Bowen and Gordon D. Prichett, Mathematics with Applications in Management and Economics, Richard D. Irwin INC.

Course Code	2264	Marks: 100	Credits: 4	Class Hours: 60
Course Title	Business, Finance and Accounting (In English/Bengali)		Exam Duration: 4 Hours	

Course Contents:

1. **Introduction to Business:** Concepts in business; Business organizations based on ownership; Joint stock and co-operative societies in Bangladesh; Business environment and the role of the government; Institutions in Bangladesh for the promotion of business, trade and commerce; Customer and stakeholder relations; Management information systems.
2. **Introduction to Finance:** Concepts in finance; Short-term, medium-term and long-term financing; Time value of money; Risk and return; Cost of capital; Capital budgeting.
3. **Introduction to Accounting:** Concepts in accounting; Recording process; Adjusting accounts, preparing statements and the accounting cycle; Financial statement analysis; Accounting information systems; Application of accounting in businesses.

Books Recommended:
Md. Jahangir Alam Sheikh and Others, Business, Finance and Accounting
Books Reference:
1. Weygandt, J. J., Kimmel, P.D. and Kieso, D.E. (2008) Accounting Principles, 9th edition, Wiley.
2. Gitman, Lawrence G, *Principles of Managerial Finance*, 10th edition.

Course Code	7420	Marks: 100	Credits: 4	Class Hours: 60
Course Title	Computer and Information Technology		Exam Duration: 4 Hours	

1. **Introduction:** What is computer, Uses of Computers, Computer Generation and Classifications, Number System, Computer Organization and Architecture, Basic Logic Gates and Truth Tables.
2. **Fundamentals of Computer Hardware:** Input Hardware, Output Hardware, Processing hardware, Peripheral and Storage Devices.
3. **Introduction to System Software and Application Software:** Introduction to Operating System. Introduction to Software Development and Concepts of Programming Languages, Compliers, Interpreters and Assembler, Program Design and Flowchart.
4. **Graphical User Interface:** Gaining Proficiency in GUI Operating System, Word Processing using Ms Word: Editing, Formatting, Colors and Styles, Drawing, Tales.
5. **Information Systems in Business:** Why study information systems?-Why Business Need information Technology-Fundamental Information System Concepts-Overview of Information System.
6. **Solving Business Problems with Information Systems:** A Systems Approach to Problem Solving-Developing Information System Solutions.
7. **Computer Systems:** End user and Enterprise Computing.
8. **Information Systems for Business Operations:** Business Information Systems-Transaction Processing System.
9. **Information Systems for Managerial Decision Support:** Management Information and Decision Support Systems-Artificial Intelligence Technologies in Business.
10. **Information Systems for Strategic Advantage:** Fundamentals of Strategic Advantage-Strategic Applications and Issues in Information Technology.
11. **Managing IT:** Enterprise and Global Management-Managing Information Resources and Technologies-Global Information Technology Management-Planning and Implementing Change-Planning for Business Change with IT-Implementing Business Change with IT-Security and Ethical Challenges-Security and Control Issues in Information Systems-Ethical and Social Challenges of Information Technology.

Book Recommended:
Mustafa Jabber, Computer and Information Technology
Reference Books:
1. Hutchinson and Sawyer, Computers and Information Systems.
2. James O'Brien: Management Information Systems
3. Laudon and Laudon: Management Information Systems.

Course Code	7203	Marks: 100	Credits: 4	Class Hours: 60
Course Title:	Sociology of Bangladesh			Exam Duration: 4 Hours

1. **The Sociology Background of Bangladesh Society:** The Ecological Background Context-The Nature of Village Society-Religion, Culture & Ethnicity-The British Colonialism and its impact-Pakistan era: the internal colonialism-emergence of Bangladesh: Language Movement-Historic speech of Sheikh Mujib on 7th March 1971-Liberaton War.
2. **Population and Ethnicity:** Population composition: age-sex-marital status-literacy-labor force-Population change: fertility-mortality-migration and population control-Ethic groups in Bangladesh.
3. **Marriage, Family and Socialization:** Changing pattern of marriage and divorce-Changing patterns of family and kinship –Cultural change and nature of socialization.
4. **Economy of Bangladesh:** Real economy: farm and non-farm activities-problems of agrarian transformation-Urban Economy: industrial growth-working class-underclass-Informal economy. Problems of industrialization-Migration: Rural-urban migration. International migration: remittance economy.
5. Social Inequality and Poverty: Nature of social inequality in Bangladesh-Income inequality, gender inequality, ethic inequality, status inequality-Growth and nature of middle class-Poverty tends.
6. **Politics:** Nature of the state, bureaucracy and political parties in Bangladesh-Political culture-governance problems in Bangladesh-Local governments in Bangladesh.
7. **Rural Society and Urbanization:** Agrarian structure: Land tenure and class structure-Community and power structure: samaj- salish- patron- client relationship.
8. **Crime and Deviance:** Pattern and forms of crime in Bangladesh-Penology and correctional methods in Bangladesh-Policy, Civil Society and prevention of crime in Bangladesh.
9. **Culture:** Pattern of religious beliefs and rituals in Bangladesh-Social groups and language-Pattern of cultural change: modernization-Problems of cultural identity: role of language, religion and ethics-Globalization of culture: cultural dependency-local culture.
10. **Education:** Structure of education: Primary-Secondary-Higher Education and social structure: differential access to education-class and social mobility-socialization and social control-Changing pattern of education: Institutional expansion-changes in curriculum-enrollment-dropout-Education policy: problems and prospects.

Books Recommended:
1. Nazmul Karim, Dynamics of Bangladesh Society
2. A. M. Chowdhury and Fakrul Alam (eds.), Bangladesh at the Threshold of the Twenty-first Century, Dhaka: Asiatic Society, 2002
3. Anwarullah Chowdhury, Agrarian Social Relations and Rural Development in Bangladesh, New Delhi, Oxford/IBH
4. Kamal Siddiqui, Jagatpur, Dhaka:UPL, 2000
5. Ashabur Rahman, Bangladesher Krishi Kathamo, UPL, 1986
6. Akbar Ali Khan, Discovery of Bangladesh, Dhaka, UPL, 1996.

Course Code	7211	Marks: 100	Credits: 4	Class Hours: 60
Course Title:	Bangladesh Society and Culture			Exam Duration: 4 Hours

1. Social and cultural background of Bangladesh society: People, Language, Ethnicity and Patterns of rural and urban community.

2. Social institution, organization, Family, Marriage, Kinship, etc.

3. Agrarian social structure, Land tenure system and land reforms, Agrarian relations and modes of production in Bangladesh. New method of farming, Rural electricity and communication network and their impact on social structure.

4. Rural power-structure, Formal and informal power-structure, Changing power-structure and leadership in contemporary Bangladesh.

5. Social rank and social stratification, Social class, Status groups, Caste and class, New urban class, Civil society, Intelligentsia, etc.

6. Ethnicity and Tribal society in Bangladesh, Changes in Tribal societies, Major factors of change missing action exposure to media, politicisation and expansion of education.

7. Bangladesh society and culture in transition, Current trend, Impact of urbanization, industrialization on contemporary Bangladesh society and culture.

8. Rural development programmes in Bangladesh, Role of NGO and government organization for social development.

9. **Women and cultural change,**: Attempts of women empowerment from local level to national level, Emerging new roles, Participation in public affairs, Special programme of women development, Enterprising urban women, Women rights and awareness building by GO and NGOs. Special programmes for mother and child health education.

10. The religion of the majority, Islamic norms and values, views and practices in societal level, Islamic education vs secular education, Islam and political mobilization, Modernising factors inherent in and Islamic culture.

Books Recommended:
1. Ahmed, Karmruddin : *Social History of Bangladesh*
2. Ester Boserup : *Women's Role in Economic Development*
3. Gunsen, Eric : *Rural Bangladesh Society*
4. Irene Tinker : *Women and World Development*
5. Islam, Md. Nural : *Role of Agriculture in Socio-economic Development*
6. Islam, Md. Nural : *Social Mobility and Elite Formation in Rural Society of Bangladesh*
7. Karim, Nazmul : *Dynamics of Bangladesh Society*
8. Margaret Mead : *Male and Female: A Study of the sexes in Changing world*
9. R.K. Mukherjee : *The Dynamics of Rural Society*
10. Salma Sobhan : *Legal Status of Women in Bangladesh*
11. Sen, Rangalal : *Political Elite in Bangladesh*
12. UNESCO : *Women in South Asia.*
13. Westergard : *Rural Society. State & Class in Bangladesh*
14. Women for Women : *Situation of Women in Bangladesh*
15. Women for Women : *Women for Women in Bangladesh*
16. Hunter, W.W. : *The Indian Musalmans*
17. বদরউদ্দীন উমর : *চিরস্থায়ী বন্দোবস্ত বাংলাদেশের কৃষক*
18. অনুপম সেন : *বাংলাদেশ: রাষ্ট্র ও সমাজ*
19. আবুল মনসুর আহমেদ : *বাংলাদেশের কালচার*
20. আব্দুল মওদুদ : *মধ্যবিত্ত সমাজের ক্রমবিকাশ*

Course Code	7192	Marks: 100	Credits: 4	Class Hours: 60
Course Title:	Political Organisation and the Political System of UK and USA			Exam Duration: 4 Hours

1. **Constitution:** Meaning and significance, Classification, Methods of Establishing Constitution, Requisites of a good Constitution.
2. **Forms of Government:** The Concept of Traditional and Modern Forms, Democracy, Dictatorship, Parliamentary, Presidential, Unitary and Federal.
3. **Theory of Separation of Power:** Meaning, Significance and Working.
4. **Organs of Government:** Legislature, Executive, Judiciary and Electorate.
5. **Political Behaviour:** Political Parties, Pressure Groups and Public Opinion.
6. **British Political System:** Nature, Features and Sources of the Constitution, Conventions, Monarchy, Parliament, The Prime Minister and the Cabinet, Party System.
7. **American Political System:** Nature and Features of the Constitution, The System of Checks and Balances, The President and Congress, Judiciary and Political Parties.

Books Recommended:

1. K.C. Wheare : *Modern Constitution*

2. K. C. Wheare : *Federal Government*

3. W.F. Willoughby : *The Government of Modern State*

4. C.F. Strong : *Modern Constitution*

5. R.M. Mac Iver : *The Web of Government*

7. ড. মোঃ মকসুদুর রহমান : রাষ্ট্রীয় সংগঠনের রূপরেখা

৮. ড. ওদুদ ভূঁইয়া : রাষ্ট্রবিজ্ঞান

৯. বিপুল রঞ্জন নাথ : রাষ্ট্রীয় সংগঠন
১০. নির্মল কান্ডি ঘোষ : আধুনিক রাষ্ট্রবিজ্ঞানের ভূমিকা

Course Code	2296	Course Title: Viva-voce + Term Paper	Marks: 50+50	Credits: 2+2

Viva-voce on courses studied in the first and second years.

Course Code	9999	Marks: 100	Non-Credit	Class Hours: 60
Course Title:	English (Compulsory)			Exam Duration: 4 Hours

Aims and objectives of this course: To develop students' English language skills, to enable them to benefit personally and professionally. The four skills — listening, speaking, reading and writing will be integrated to encourage better language use.

1. **Reading and understanding**   5×4=20

Students will be expected to read passages that they might come across in their everyday life, such as newspapers, magazines, general books etc. Simple stories will also be included to give students a familiarity with different uses of the language.

[N.B. : 5 Questions are to be answered. Each question will carry 4 marks. There may be division in each question]

   a) Understanding different purposes and types of readings
   b) Guessing word-meaning in context.
   c) Understanding long sentences
   d) Recognizing main ideas and supporting ideas.
   e) Answering comprehension questions.
   f) Writing summaries.

2. **Writing**   40
   a) Writing correct sentences, completing sentences and combining sentences.   5

   b) Situational writing : Posters, notices, slogans, memos, advertisements etc.   4

   c) Paragraph writing : Structure of a paragraph; topic sentences; developing ideas; writing a conclusion; types of paragraphs (narrative, descriptive, expository, persuasive); techniques of paragraph development (such as listing, cause and effect, comparison and contrast).   8

Or,

   d) Newspaper writing : Reports, press releases dialogues etc.

   e) Writing resumés.   **Or,**   8

   f) Writing letters : Formal and informal letters, letters to the editor, request letters, job applications, complaint letters etc.

   g) Essay : Generating ideas; outlining; writing a thesis sentence; writing the essay: writing introductions, developing ideas, writing conclusions; revising and editing.   15

3. **Grammar**   25
   a) Word order of sentences.

   b) Framing questions.

   c) Tenses, articles, subject-verb agreement, noun-pronoun agreement, verbs, phrasal verbs, conditionals, prepositions and prepositional phrases, infinitives, participles, gerunds. (Knowledge of grammar will be tested through contextualised passages).

   d) Punctuation.

4. **Developing vocabulary** : Using the dictionary, suffixes, prefixes, synonyms, antonyms, changing word forms (from verb to noun etc.) and using them in sentences.   10

5. **Translation from Bengali to English**.   1×5=5

6. **Speaking skills** : Speaking skills should be integrated with writing and reading in classroom activities.

The English sound system; pronunciation skills; the IPA system; problem sounds, vowels, consonants and dipthongs; lexical and syntactic stress.

(Writing dialogue and practising it orally students can develop their speaking skill. Dialogue writing can be an item in writing test.)