

MASTER OF SOCIAL SCIENCE (M.S.S.) IN ECONOMICS



Effective from: Spring 2023

Department of Economics

**Faculty of Social Science
Varendra University
Rajshahi 6204, Bangladesh**

1. Title of the Academic Program:

Master of Social Science (M.S.S.) in Economics

2. Name of the University:

Varendra University

3. Vision of the University

The vision of the university is to emerge as one of the leading and premier centers of higher studies in arts, social science, science, engineering and technology. We aim at providing an education of high excellence to our young learners in a congenial and friendly atmosphere, and attracting brilliant students, distinguished scholars, researchers, scientists from home and abroad.

4. Mission of the University

The mission of the university is to contribute to national development by producing innovative, skilled, and technologically trained manpower. Ours is a knowledge-based society, and we hope to equip our students with knowledge and skill to face global challenges and become leaders of innovation in different fronts of practical life. The mission of VU also includes the promotion of humanism and peace through liberal education.

5. Name of the Degree

M.S.S. in Economics

6. Name of the Faculty offering the program

Faculty of Social Science

7. Name of the Department offering the program

Department of Economics

8. Vision of the Program

The vision of the program is to create an internationally recognized community of learning, foundation of knowledge and its augmentation, and of practice which will prepare individuals concerned with multifarious economic and social problems and promises of Bangladesh as well as facing the challenges and opportunities of the global economy in the 21st century. The program also envisions to capitalize on the benefits of globalization through a knowledge-based economy by building up well-equipped academic personnel centered toward academic achievement.

9. Mission of the Program

The M.S.S Program in Economics envisage that specialization in economics will equip students with necessary tools for economic analysis along with intensive practical applications with the use of state of the art technology in analyzing economic problems, issues and concepts. The program intends to deliver challenging, stimulating, and research-based academic trainings in an environment that supports learning and development of independent critical thinking among the students and to produce competent individuals with a better understanding of local, national and global economic issues and use necessary theories and tools for proper analysis of these issues to help Bangladesh and global economy to move forward.

10. Description of the program

The program offers one year Master of Social Science (M.S.S.) in Economics spreading over two semesters by both coursework and research.

11. Program Educational Objectives (PEO)

The Master of Social Science Program in Economics is designed to achieving the objective of developing in-depth knowledge in order to produce high-quality individuals who are intellectually and technically competent in frontier areas of economic theories and methods, and who will be able to apply that knowledge to analyse real-world economic problems and play notable roles in the wide range of employment, research, and socio-economic changes.

12. Program Learning Outcomes (PLO)

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

- Acquire advanced knowledge of Applied Economics and Development Issues, as well as to strengthen their ability to develop ideas based on that knowledge.
- Empower themselves with the necessary skills to meet the needs of industry and policymakers on a national and worldwide level.
- Develop the ability to investigate the core causes and potential remedies to the existing problems in the economy of Bangladesh.
- Develop skills to carry out independent research in the fields of Economics and related areas.
- Gain effective skills for presentations and viva-voce.

13. Generic Skills/Graduate Profile (based on Need Assessment)

The M.S.S. program in economics will provide necessary skills that equip graduates required capabilities and qualifications for employment and lay the foundations for a lifetime continuous learning and personal development.

14. Structure of the Curriculum

a) Duration of the Program:

Years: 1 Year

Semester: 2 Semesters

There will be two semesters/academic sessions in each academic year. They are as follows:

Name of the Semester	Duration
Spring	January to June
Summer	July to December

b) Total credit: 36 Credits

c) Total minimum credit requirement: 36 Credits

d) Admission Requirement

Students who intend to get themselves admitted into Masters Programs should have at least 5.00 points as shown below without any 3rd division/class or 6.00 points with a 3rd division/class. The points to be computed as below:

Degree	Points		
	1 st Division/Class/ Equivalent (3.5 and above)	2 nd Division/Class/ Equivalent (2.50 to 3.49)	3 rd Division/Class/ Equivalent (2.00 to 2.49)
SSC/Equivalent	3	2	1
HSC/Equivalent	3	2	1
Degree Pass	3	2	1
Honors or 4 Years Degree	4	3	2

Note: Minimum CGPA 2.00 is required at each level of examination.

e) Minimum CGPA requirements for Graduation

All required credits of the programs should be earned within the maximum length of period.

- a. Minimum CGPA should be 2.
- b. Students having 'F' grade(s) in any course(s) will not be eligible for the degree.

f) Maximum academic years of completion

A student must not get more than two additional years to complete their degree.

15. Distribution of Courses

SEMESTER -1 (SIX MONTHS)		
Course Code	Course Title	Credit
ECO 5101	Advanced Microeconomics	3.0
ECO 5102	Development Economics	3.0
ECO 5103	Banking and Financial Institutions	3.0
ECO 5104	Health Economics	3.0
ECO 5105	Public Finance	3.0
ECO 5106	Population Economics	3.0
ECO 5107	Islamic Economics	3.0
	Total Credit	18
SEMESTER -2 (SIX MONTHS)		
ECO 5201	Advanced Macroeconomics	3.0
ECO 5202	Econometrics	3.0
ECO 5203	International Economics	3.0
ECO 5204	Environmental Economics	3.0
ECO 5205	Economic Thought	3.0
ECO 5206	Labour Economics	3.0
ECO 5207	Industrial Economics	3.0
ECO 5208	Comprehensive Viva	3.0
ECO 5209	M.S.S. Thesis	6.0
	Total Credit	18

In the first semester, the courses- ECO 5101, ECO 5102, ECO 5103, ECO 5104, and ECO 5105, and in the second semester the courses-ECO 5201, ECO 5202, ECO 5203, and ECO 5204 are compulsory for all the students (Thesis and Non-thesis). If any student qualifies (at least minimum CGPA 3.50 at Undergraduate level) for a thesis course and is willing to do thesis (bearing 6 credits), he/she will be exempted from two optional courses-one from each semester. There will be a comprehensive viva at the end of Semester-2 carrying 3 credits, which is compulsory for all students. The comprehensive viva of the Thesis Group will be held after submitting the Thesis.

16. Teaching Strategies:

Teaching strategies for the M.S.S Program in Economics generally includes class lectures, power point presentations, group discussion, lecturing by expert/guest speakers, field visit, seminars and workshops, etc.

17. Assessment/Evaluation Procedures:

Evaluation of students' performance will be based on **Continuous Internal Evaluation (CIE)** and **Semester End Examination (SEE)**. SEE includes midterm examination and final examination whereas CIE contains class-test, quiz, attendance, presentation and assignments/case study/term paper/project/viva/group work. CIE will cover 50% of the total marks and the remaining 50% are reserved for SEE. The distribution of marks is as follows:

Theory course:

SEE	Mid Term	20%
	Final	30%
CIE	Class-test, quiz, attendance, presentation and assignments/case study/term paper/project/viva/group work	50%
Total		100%

*** Students must obtain pass marks in SEE and CIE separately**

1) Grading Scale and Grades

Numerical Grade	Letter Grade	Grade Point
80% and above	A+	4.00
75% to less than 80%	A	3.75
70% to less than 75%	A-	3.50
65% to less than 70%	B+	3.25
60% to less than 65%	B	3.00
55% to less than 60%	B-	2.75
50% to less than 55%	C+	2.50
45% to less than 50%	C	2.25
40% to less than 45%	D	2.00
Less than 40%	F	0.00

2) Cumulative Grade Point Average

Student's performance will be evaluated on the basis of Grade Point Average (GPA) semester wise and Cumulative Grade Point Average (CGPA) of total completed courses.

The CGPA will be computed in the following manner:

$$\text{CGPA} = \frac{\text{Sum of (Earned Credit} \times \text{Corresponding Grade Points)}}{\text{Total Credits}}$$

3) Retake

- If a student obtains F grade(s) in any courses for any reasons, s/he must retake the course(s).
- For retake and improvement, a student can take a maximum of 12 credits or 4 courses altogether in any semester.
- If s/he passes after appearing at the retake examination, the (passed) result will be used for calculation of GPA and CGPA, but past grade must be recorded in the students' database; or grade report will be shown as 'R' (Retake). But in final official transcript (after completion of the degree) 'R' will not be shown.

- d. If a student obtains F grade(s) after the end of the program, s/he will get a chance to complete the course (s) within additional 2 years after the end of his/her specific time of completing the degree. But in case of fail in Pre-Requisite course(s), the student must retake the course in the succeeding semester.
- e. Except for Pre-Requisite course(s), a student can retake the course(s) at his/her convenient semester(s).
- f. A retake student will complete all course curriculums (i.e. class attendance, class test, assignment etc.) including midterm and final examinations of the specific course(s). In special cases, if the student cannot attend classes or continuous assessment (i.e., assignment, class test etc.), previous marks can be accepted to calculate GPA.
- g. If course(s) cannot be offered due to any reason (i.e., course drop or unavailability of students etc.), department can take necessary steps to arrange only midterm and final examination for the retake student(s). In such cases, other marks except midterm and final examination will be carried forward from the previous semester where s/he attended the course(s).
- h. The department may arrange separate examinations with separate questions (for midterm and final examinations only) for retake students if it cannot be accommodated in the regular examination schedule. But the examination must be completed in not more than 7 working days after the completion of midterm or final examinations.
- i. Students who want to retake a course must get his/her registration completed at the beginning of each semester.
- j. A student will have to pay requisite fee of the per credit fees for the retake course(s).
- k. Retake rules are applicable for both Undergraduate and Graduate/Masters programs.
- l. If a student retakes his/her failed course(s) after finishing normal duration of the program, s/he will pay only registration fee, exam fee and requisite fee for retake of course(s). If s/he fails to improve again, no refund of fees will be made.

4) Improvement

- a. A student obtaining B, B-, C+, C and D grades may improve the grade(s) by appearing in the midterm and final examinations or final examination.
A student may improve above mentioned grade(s) in any semester along with regular courses. In case of improvement after passing all courses of the respective program, a student will be allowed once in the succeeding semester, but s/he has to take approval from the head/coordinator of the department
- b. For improvement and retake a student can take a maximum of 12 credits or 4 courses altogether in any semester.
- c. To prepare the improvement results, the course teachers can only modify midterm and final examination marks of the students in the result automation process. Other marks (i.e., class test, assignment etc.) will be automatically generated by the software from the previous database.
- d. A student will have to pay requisite fee of the per credit fees for the improvement of grades.
- e. If an examinee fails to improve his/her result, the previous result in the software will stand.
- f. If a student improves his/her course(s) after finishing normal duration of the program, s/he will pay only registration fee, exam fee and requisite fee for improve of course(s). If s/he fails again, no refund of fees will be made.

5) Semester Drop

- a. After getting enrolled for a semester, if any student fails to continue academic activities (i.e. class, exam, practical, assignment, presentation etc.) up to midterm examination, s/he will be considered as a semester drop student. In this case s/he will not be allowed to sit for the final exam.
- b. After getting enrolled for a semester, if any student completes all academic activities, but fails to appear at the midterm examination, the student may be allowed to sit for the final exam.
- c. Semester drop student may get readmission in the subsequent semester on payment of semester drop fee and his/her paid amount (full/partial) will be adjusted at the time of readmission. However, if any student discontinues the study forever, s/he will not get back the money paid at the time of admission.
- d. In case of semester drop or withdrawal, a student will be considered as a fresh student for the semester. S/he will get all chances for improvement, retake and re-admission like a fresh student. However, a student must complete his/her program within the time mentioned in section 7 from the time of his /her first semester admission.

18. Description of Courses:

FIRST SEMESTER

Course Code: ECO 5101

Course Credit: 3

1st Semester

Course Title: Advanced Microeconomics

Course Description

This course is based on the theoretical and applied insights of Advanced Microeconomics in post-graduation level. The course focuses on in-depth discussion on the theories and applications of Advanced Microeconomic issues that will enrich students to deepen their understandings of the economic principles. The course aims at enabling students to enhance their analytical capability regarding consumer behavior under uncertainty. This course also covers producer's theory, general equilibrium analysis and welfare economics which gives a pathway to the students to handle their real life phenomenon.

Course Objective

- To familiarize the students with quantitative techniques of micro economics;
- To enable students and researchers in comparing among the competing alternatives in terms of mathematical elegance and precisions;
- To establish a base for the students in applying the ideas and techniques in microeconomics related practical fields;

Course Learning Outcome (CLO):

At the end of the course, the student will be able to-

1. get advanced theoretical and practical insights of microeconomics
2. know linear expenditure system and utility maximizing behaviour
3. analyze decision making situation under risk and uncertainty with special emphasis on insurance choice and provide tools for measuring risk and risk aversion.
4. acquire knowledge about firm's production function and cost function
5. gain knowledge about different concepts of managerial economics
6. explain about general equilibrium problem and find out its solution
7. understand the fundamental theorems of welfare economics, social welfare function and Pareto criterion
8. critically evaluate the application of different game theories in their practical life.

Course Content

CLOs Mapping	Chapter	No. of lectures	Teaching Strategy	Assessment
1,2	1. Consumer behavior: The linear expenditure system, additive utility functions, indirect utility function.	5	Lecture, Class discussion	Class Participation, Q/A session
1,3	2. Consumer behavior under uncertainty: The expected utility hypothesis, risk aversion and risk preference; insurance and lottery.	5	Lecture, Class discussion, problem solving	Class Participation, Quiz
1,4,5	3. Producer's theory: Cost functions and cost minimization, the long run and short run cost curves; factor price and cost functions, envelope theorem for constrained optimization; Production function Vs cost function.	6	Lecture, Class discussion, graphical analysis	Class Participation, class test, assignment

Mid-term Written Examination: Chapter 1, 2, 3				
1,4,5	4. Managerial models of firm: Marris' model of managerial enterprise, the goal of the firm, constraints; equilibrium of the firm; Williamson's model of managerial discretion.	6	Lecture, Group discussion, power-point presentation	Class Participation, Q/A session
4,6	5. General equilibrium analysis: The meaning of general equilibrium, existence, uniqueness and stability of general equilibrium.	6	Lecture, Class discussion, problem solving	Class Participation, Presentation
7	6.Welfare economics: The Pareto criterion, the compensation criterion—Kaldor, Hicks, Scitovsky, social welfare function, the impossibility theorem.	6	Lecture, Group discussion	Class Participation, assignment
1,8	7. Theory of Games and Economic Behaviour: Description of a game; economic modeling of strategic choices, solution concepts; Nash equilibrium, interpretation of mixed strategies; refinements of Nash equilibrium.	6	Lecture, Group discussion, Guest lecture	Class Participation, Q/A session
Final Written Examination: All Chapters				

Reading Materials:

Henderson, J M and Quandt, R E (2003) *Microeconomic Theory: A Mathematical Approach*, Tata McGraw-Hill

Koutsoyannis, A (1979), *Modern Microeconomics*, Macmillan.

Layard, R. and Walters, A. (1978): *Microeconomic Theory*, McGraw- Hill.

Varian, H. R (1992) *Microeconomic Analysis*, W. W. Norton & Company,

McConnell, C. R., Brue, S. L., & Flynn, S. M. (2009). *Microeconomics*. Boston: McGraw-Hill Irwin.

Mas-Collell A, Whinston M, *Green JR* (1995). *Microeconomic Theory*. Oxford University Press.

Course Code: ECO 5102

Course Credit: 3

1st Semester

Course Title: Development Economics

Course Description

This course is designed to acquaint students with comprehensive idea regarding specific development issues linked with development process of the economies. Students need to get comprehensive knowledge on these concepts, theories and approaches for better understanding of the development process of an economy. It emphasizes to discuss the issues such as theories of development, international trade and development, foreign finance and development, inequality, poverty and population growth.

Course Objective

- to provide advanced knowledge required to understand various issues of development;
- to enable relate various development theories with empirical evidences in the developing countries;
- to familiarize students with concepts of international trade and development, foreign finance and development, inequality, poverty and population growth.

Course Learning Outcome (CLO):

At the end of the course, the student will be able to-

1. deepen their knowledge about various economic development issues and relate these issues in practical life.
2. gain knowledge about different theories of development in connection with structural change model.
3. understand the mechanism of forming capital and saving for economic development.
4. explain the necessity of international trade and foreign financing for economic development.
5. enhance the understanding capacity about inequality, poverty and population growth
6. formulate policy for reducing in inequality, poverty and population growth for economic development.
7. enrich their knowledge about the role of state in economic development and relate the importance of the input output model to government planning.

Course Content

CLOs Mapping	Chapter	No. of lectures	Teaching Strategy	Assessment
1,2	1. Theories of development: The Linear- Stages Theory: Rostow's stages of growth model, the Harrod-Domar growth model.	5	Lecture, Class discussion	Class Participation, Q/A session
1,2	2. The Structural Change Model: The Lewis-Fei-Ranis model, Harris-Todaro model of internal migration	5	Lecture, Class discussion, problem solving	Class Participation, Quiz
5,6	3. Inequality, Poverty and Population Growth: Kuznets inverted-U, demand side theories and supply side theories, a relationship between population growth and development.	6	Lecture, Class discussion	Class Participation, Q/A session
1,3	4. Capital and Savings: Capital formation and domestic savings; Components of national saving, determinants of domestic savings; Government saving and Ricardian Equivalence; foreign aid and foreign investment, Impact of foreign aid.	6	Lecture, Class discussion, problem solving	Class Participation, class test, assignment
Mid-term Written Examination: Chapter 1, 2, 3				
1,2,4	5. International Trade and Development: Static and dynamic effects of international trade, export instability, long run terms of trade deterioration, trade policy and the developing countries.	6	Lecture, Class discussion	Class Participation, Q/A session
1,4	6. Foreign Finance and Development: Third world debt crisis, IMF stabilization programs, East Asian financial crisis; Globalization and its effects on developing countries.	5	Lecture, Class discussion, problem solving	Class Participation, Quiz/class test

7	7. Role of State in Economic Development: Advantages of markets; market failures and the need for government intervention; tools of development planning – use of input output table in government planning; government failures and the need for governance.	6	Lecture, Class discussion, problem solving	Class Participation, assignment
Final Written Examination: All Chapters				

Reading Materials:

- Todaro, M. P. and Smith, S. C. (2003). *Economic Development*, 8th edition. Addison-Wesley.
- Perkins, D., Radelet, S., Snodgrass, D., Gillis, M. and Roemer, M. (2001). *Economics of Development*, 5th edition. W.W. Norton.
- Meier, G. and Rauch, J. (2000). *Leading Issues in Economic Development*, 7th edition. Oxford University Press.
- Ray, D. (2008). *Development economics* (pp. 1364-1379). Palgrave Macmillan UK.

Course Code: ECO 5103	Course Credit: 3	1st Semester
Course Title: Banking and Financial Institutions		

Course Description

The Banking and Financial Institutions course covers the comprehensive banking sector and its role to the economy. It aims to provide the students with advanced knowledge of commercial banking, central banking, development banking, international banking, and different theories of banking which provide them a complete picture of a banking phenomenon. Thus, The course will provide the students different concepts and structure of banking system, asymmetric information, bank management and regulation, objectives and instruments of monetary policies, and transmission mechanism of monetary policy and finally importance of banking sector for economic development.

Course Objective

- to study about the importance of banking sector for economic development;
- to find out strategies adopted by the banking sector in modern monetary economy and financial markets;
- to demonstrate knowledge of development banking, International banking and other financial institutions among the students for their practical purpose.

Course Learning Outcome (CLO):

At the end of the course, the student will be able to-

1. get the advanced idea about banking sector and its adopting strategy.
2. know about balance sheet of bank and can explain the basic components of balance sheet.
3. enrich their knowledge from learning different banking theories and can relate these theories in practical life.
4. acquire knowledge about activities of commercial bank, central bank, development bank, and international bank.
5. enhance their knowledge about managing deposit service and non-deposit liabilities.
6. get basic idea about the mechanism of consumer loans, credit card loans and real estate loans.
7. understand about the different policy taken by the banking institutions.

Course Content:

CLOs Mapping	Chapter	No. of lectures	Teaching Strategy	Assessment
1,2	1. Commercial Banking: Balance sheet of a bank; items of a balance sheet; portfolio management of a commercial bank; risk-return indifference curve; the mean-variance portfolio, portfolio theory and financial intermediaries; E- banking.	5	Lecture, Class discussion	Class Participation, Q/A session
1,3	2. Theories of Banking: The nature of Banking, Banking Theory: Historical and Contemporary, Liquidity of the Banking System.	5	Lecture, Class discussion, problem solving	Class Participation, Quiz
1,2,4	3. Central Banking: Structure of a central bank; monetary policy of the central bank; uses of repurchase agreement (Repo) and reverse repo to control money supply; cost and risks of using Repo; bank regulation; the Bangladesh Bank—working of the Bangladesh Bank.	5	Lecture, Group discussion and Guest lecture	Class Participation, assignment
Mid-term Written Examination: Chapter 1, 2, 3				
5	4. Managing Deposit Services and Non-Deposit Liabilities: Deposits and its types; interest rates on different types of deposits; pricing deposits; cost plus profit margin approach and total customer relationship approach; liability management and the customer relationship doctrine; alternative non-deposit sources of funds; measuring and choosing non-deposit funds' need.	6	Lecture, Class discussion, problem solving	Class Participation, Quiz/class test
6	5. Consumer Loans, Credit Cards and Real Estate Lending: Types of loans granted to individuals and families; residential mortgage loans; nonresidential loans and credit card loans; characteristics of consumer loans; evaluating a consumer loan application; real estate loans; determining the rates of interests on consumer loans; nonresidential loans and home mortgage.	5	Lecture, Class discussion, problem solving	Class Participation, assignment
1,4,7	6. Development Banking: Working of development banks; needs for development banks; objectives of development banks; development banking in Bangladesh-- RAKUB, Krishi Bank, Shilpa Bank; alternative banking and Grameen Bank.	6	Lecture, Class discussion, power-point presentation	Class Participation, Q/A session

4,7	7. International Banking: Pros and cons of offshore banking; offshore banking in the context of Bangladesh; Eurodollar banking and Eurocurrency banking; the World Bank, IMF, Asian Development Bank.	5	Lecture, Class discussion, problem solving	Class Participation, Presentation
Final Written Examination: All Chapters				

Reading Materials:

Lockett, D. G., 1976, *Money and Banking*. London, McGraw Hill.

Mishkin, F. S., 2012, *The Economics of Money, Banking and Financial Markets*, Pearson.

Boskey, S. (1959). *Problems and practices of development banks* (No. HG4517 B6).

Ahmad, A. and Awan, K. R. (1992): Lectures on Islamic Economics, IRTI, Islamic Development Bank Jeddah.

Course Code: ECO 5104	Course Credit: 3	1st Semester
Course Title: Health Economics		

Course Description

Health Economics is an applied field of study that permits for the systematic and precise analysis of the problems that we face in improving health status. Health Economics aims to understand the behavior of individuals, health care providers, public and private organizations, and governments in decision-making by applying microeconomic theories of consumer, producer and social choice. This course is designed for post-graduate students to provide knowledge about the healthy lifestyles, positive health outcomes, and economic evaluation of new health technologies, appropriate prices of medical inputs, and optimal public and private investment in health sector. It will also help students to understand how the markets for health and health services are different from other goods, with a particular emphasis on the role of government and market failure. In addition, it will allow the students to understand the theoretical and empirical aspects of key health economics issues, including the demand for health and health services, supply side concerns, asymmetric information problems, health insurance and related topics.

Course Objective

The main objective of this course is:

- to teach students how to apply economic theories and concepts in analyzing different health related issues and problems;
- to develop an understanding of the relevance of applying economic concepts to the health care sector;
- to make them able to use these theories and concepts in analyzing health system and health related problems.

Course Learning Outcome (CLO):

At the end of the course, the student will be able to-

1. understand economic characteristics of health and health care;
2. deal logically the relationship between health related theory, empirical modeling and interpretation of results;
3. suggest ways to apply and link economic theory with health-related issues;
4. realize how economic theory and methods are applied in the health care sector to efficiency and equity considerations in health and health care;
5. explore the methods of efficient resource allocation in health and health care.

Course Content:

CLOs Mapping	Chapter	No. of lectures	Teaching Strategy	Assessment
1	1. Introduction to Health Economics: Concept of health economics, and health care economics; relevance of health economics; importance of health sector in macro economy; economic problems faced by the health sector.	5	Lecture, Class discussion	Class Participation, Q/A session
2,3,5	2. The Production Function of Health: Production function of health; measures of health; morbidity based indicators; healthcare as an output of the health services industry and as an input to health; life style and health; role of medicine; public health; nutrition and schooling on health; determining the allocation of resources to healthcare using health production function; empirical studies health production function.	5	Lecture, Class discussion, Graphical presentation	Class Participation, Quiz
2,3	3. Demand for Health and Healthcare: Need vs demand, consumer as health producer Grossman model on demand for health; investment and consumption on aspect of health investment; graphical and algebraic exposition of Grossman model; factor affecting demand for health and care; criticism of Grossman model; empirical evidence..	5	Lecture, Class discussion, problem solving	Class Participation, class test,
3,4	4. Asymmetric information and health care: Information and market, Extent of the problem of asymmetric information in health sector, health insurance and information, adverse selection and moral hazard, The agency relationship, agency and health care, consumer information, prices and quality.	5	Lecture, Class discussion, Power-point presentation	Class Participation, assignment
Mid-term Written Examination: Chapter 1, 2, 3,4				
2,3,5	5. Insurance: Risk and insurance; insurance technology; demand for insurance; risk aversion and willingness to pay for insurance; supply of insurance; the optimal level of coverage; effect of coinsurance and deductibles on demand; loading cost and insurance firm; tax system and demand for insurance; the price for insurance; the question of uninsured.	6	Lecture, Group discussion,	Class Participation, Q/A session

2,3,5	6. Cost-Benefit Analysis and Application to Health Care: Cost-benefit analysis: basic principles; the valuation of benefits and costs; cost-benefit analysis in health care; quantity- adjusted life years (QALYs), cost-effectiveness analysis.	5	Lecture, Class discussion, problem solving	Class Participation, Quiz
4,5	7. Health Care System in Bangladesh: Health status of the population; morbidity and mortality patterns; nutritional status; health care organizations; health policies and programs; health workforce development; health service indicators; financing health; development of private health facilities.	5	Lecture, Class discussion,	Class Participation, assignment
Final Written Examination: All Chapters				

Reading Materials:

Fledstein, P. J. (2004). *Healthcare Economics*, 6th edition. Belmar Publishers Inc.

Folland, S., Goodman, A. C. and Stano, M. (2016). *The Economics of Health and Health Care*, 7th edition. New York: Prentice Hall.

McGuire, A., Henderson, J., & Mooney, G. (1988). *The economics of health care: an introductory text*. Routledge & Keegan Paul.

Course Code: ECO 5105	Course Credit: 3	1st Semester
Course Title: Public Finance		

Course Description

The course has significant role to provide knowledge about the mechanism of government activities. As a major branch of economics, this course offers broad sense of the necessity of public sector and different laws and hypothesizes to explain growth of public sector. In addition, this course will help to earn adequate knowledge in the areas of public revenue and expenditure and debt financing. After completing this course, students will have capability to understand issues of government policy. In this course students will learn more details about public goods, Government expenditure and revenue, Government budget, public debt and fiscal policy.

Course Objective

The major objective of this course is

- to provide basic knowledge to students about the financial activities of government concerning revenue, expenditure and debt operations and their effects on the economy.
- to provide advanced knowledge about public goods, free rider problem and provision of public goods.

Course Learning Outcome (CLO):

At the end of the course, the student will be able to-

1. get clear concept about public good, free rider problem and provision of public good.
2. understand and evaluate the financial activities of government concerning revenue, expenditure and debt operations;
3. learn the procedure of tax collection and the incidence of tax; get idea about public debt and how government finance it;
4. earn knowledge about the positive and negative externalities of government activities and fiscal policy in developing economies.

5. enhance the understanding about types and incidence of taxation and relate the consequence to their practical life.

Course Content

CLOs Mapping	Chapter	No. of lectures	Teaching Strategy	Assessment
1,2	1 Public Goods: Concepts of public goods; models of public good; pure and impure public goods; free riding and public good provision.	5	Lecture, Class discussion	Class Participation, Q/A session
2	2. Government Expenditure: Causes of growth of public sector; Wagner's hypothesis, Engel's law, Baumol's unbalanced growth model; Peacock-Wiseman hypothesis.	5	Lecture, Class discussion,	Class Participation, Quiz
3	3. Government Revenue: Objectives and principles of taxation; benefit principle and ability to pay principle; personal income tax, corporate tax and expenditure tax; indirect taxes.	6	Lecture, Class discussion, problem solving	Class Participation, class test,
Mid-term Written Examination: Chapter 1, 2, 3				
2,3	4. Government Budget: Concepts and techniques; balanced and unbalanced budget; budgets of Bangladesh.	6	Lecture, Class discussion, Guest lecture	Class Participation, Q/A session,
1,2	5. Public Debt: Concept of public debt; effects on consumption and investment; burden of public debt; management of public debt.	6	Lecture, Class discussion, Power-point presentation	Class Participation, Quiz
5	6. Types and Incidence of Taxation: Direct tax, indirect tax, value added tax, The impact, the incidence and the effects of a tax, shifting of a tax. Single and multiple tax system, proportional and progressive tax system, direct and indirect tax. Merits and demerits of direct and indirect tax.	6	Lecture, Class discussion, Guest lecture	Lecture, Class discussion, Class test
2,4	7. Fiscal Policy: Fiscal policy for employment generation; anti-inflationary fiscal policy; fiscal policy and growth; fiscal policy in developing economies, Fiscal policy in Islam.	6	Lecture, Class discussion, Graphical presentation	Class Participation, assignment
Final Written Examination: All Chapter				

Reading Materials:

Aronson J. Richard (1985), *Public Finance*, Singapore: McGraw-Hill.

Gruber, Jonathan (2010), *Public Finance and Public Policy*, Third Edition, Massachusetts Institute of Technology, Worth Publisher.

Musgrave Richard A. and Peggy B. Musgrave, (1980). *Public Finance in Theory and Practice*

Course Code: ECO 5106	Course Credit: 3	1st Semester
Course Title: Population Economics		

Course Description

The course dwells on the role of population towards economic growth and development of an economy. It looks at how the different aspects of the society play a major role in population growth in relation to economic growth and development. The course begins with different population theories, the time allocation model of fertility analysis, the household production model, evolutionary patterns of world population growth, population projections and policies. Besides, students will account for the rising volume of international population migration around the world in recent years, the types and incidence of migration flows, impacts of economic activities, and distribution of resources among households. In particular students will learn about the phenomenon of population policies and models that households can adopt in order to foster economic development.

Course Objective

The major objective of this course is

- to provide basic knowledge to students about the concept of population and its interrelated aspects on the growth and development;
- to discuss about problems emerging from population and find out probable solutions of population related problems.

Course Learning Outcome (CLO):

At the end of the course, the student will be able to-

1. relate the population resources to economic activities which leads to economic development
2. gather knowledge about different population theory
3. explain the time allocation model of fertility analysis and can apply in their real life
4. learn about household production model and theories of population migration
5. find out probable solutions of population related problems.
6. know about the role of population policy towards economic growth and development.
7. explore the relationship between population growth and economic development.

Course Content:

CLOs Mapping	Chapter	No. of lectures	Teaching Strategy	Assessment
1,2	1. Population Theories: The Malthusian theory; the Marxian theory and the optimum theory.	5	Lecture, Class discussion	Class Participation, Q/A session

1,3	2. The Time Allocation Model of Fertility Analysis: Basic features of the model; utility function and household income,; derivation of demand function for child services; properties of the demand function.	6	Lecture, Class discussion, problem solving	Class Participation, assignment
1,4	3. The Household Production Model: Price and income effects; effects of wife's education on demand for children; evaluations of this model.	5	Lecture, Class discussion, Power-point presentation	Class Participation, class test,
Mid-term Written Examination: Chapter 1, 2, 3				
1,2,5	4. The Threshold Hypothesis: Theoretical analysis; its applicability in Bangladesh; empirical findings in different LDCs.	6	Lecture, Class discussion	Class Participation, Q/A session
4,5	5. Theories of Migration: Push and pull hypothesis; selectivity hypothesis; neoclassical theory of investment; the Lewies-Ferains model of labor transfer and economic development; the Todaro model.	7	Lecture, Class discussion, problem solving	Class Participation, Quiz,
5,6	6. Population Policy: Heavy population pressure and population policy; population policy and planning in Bangladesh.	5	Lecture, Group discussion,	Class Participation, assignment
7	7. Population and Economic Development: Relationship between population growth and economic development; endogenous and exogenous variables; some erroneous approaches; a proper theory – the critical minimum effort thesis.		Lecture, Class discussion, problem solving	Class Participation, Quiz,
Final Written Examination: All Chapters				

Reading Materials:

Barclay, G. W. (1958). *Techniques of population analysis* (No. HB851 B25).

Spengler, J. J., & Duncan, O. D. (Eds.). (1956). *Population theory and policy: selected readings* (pp. 400-09). Glencoe: Free Press.

Todaro, M. P. and Smith, S. C. (2008): *Economic Development* (8th ed.), Singapore, Pearson Educztion.

Course Description

Islamic economics refers to the knowledge of economics or economic activities and processes in terms of Islamic principles and teachings. Islam has a set of special moral norms and values about individual and social economic behavior. Therefore, it has its own economic system, which is based on its philosophical views and is compatible with the Islamic organization of other aspects of human behavior. Islamic Economics has important role in our life. By studying this course a student can get complete idea about microeconomic and macroeconomic policies, money and banking institutions, public finance, international trade and economic development which are based on the law of Shariah.

Course Objective

The major objective of this course is

- to provide basic knowledge of the principles of Islamic economics and the Islamic economic system to the students;
- to develops skills of the students to interpret the economic phenomena according to the law of Shariah.

Course Learning Outcome (CLO):

At the end of the course, the student will be able to-

1. gather knowledge about Islamic economic principles or economic system.
2. acquire knowledge about the Islamic micro economic and macroeconomic theory.
3. increase their knowledge about Islamic monetary and fiscal policies
4. enrich their understanding about functions and contribution of Islamic money and banking institutions to economic development.
5. understand the role of state in an Islamic economy and public finance in early Islamic days.
6. gather knowledge about Islamic international trade mechanism and economic development process.
7. identify the place of women, sphere of economic activities of women and the women empowerment system in Islamic economics.

Course Content:

CLOs Mapping	Chapter	No. of lectures	Teaching Strategy	Assessment
1,2	1. Microeconomic Concepts in Islamic Economics: Theory of Islamic consumer behavior- basic concepts; contributions of Fahim Khan; Monzer Kahf and AnasZarka; Islamic theory of demand and supply.	5	Lecture, Class discussion	Class Participation, Q/A session
1,2	2. Macroeconomic Concepts in Islamic Economics: Theory of Islamic consumption function; contribution of Mannan and Ausuf Ahmad; savings and investment theory in an Islamic economy.	5	Lecture, Class discussion, problem solving	Class Participation, Quiz
4	3. Money and Banking: Sources of monetary expansion; Islamic monetary policy; objectives and instruments; Islamic banking- definition and characteristics of Islamic Banking; concepts of riba; operational mechanisms; models of accumulation of funds and investment; role of central banking in Islam.	5	Lecture, Group discussion	Class Participation, Q/A session, class test

Mid-term Written Examination: Chapter 1, 2, 3				
1,2,3	4. Public Finance: Public finance in early Islamic days; public finance in a modern Islamic state; role of state in an Islamic economy. Islamic fiscal policy- the role of zakat; objectives of zakat policy; socio-economic impact of zakat; some controversial issues.	5	Lecture, Class discussion	Class Participation, Q/A session
4	5. International Trade: The theory of international trade and the Muslim world; the position of the Muslim world in world economy; D-8, GCO, ECO and the Islamic common market; globalization; WTO and Muslim world.	5	Lecture, Class discussion, Power-point presentation	Class Participation, Quiz
1,6	6. Economic Development: Definition of Islamic economic development; is Islam an obstacle to development? Basic indicators; development priorities in Islam; goals and strategies of development in Islam; mobilization of resources-financial resources, human resources.	5	Lecture, Class discussion, problem solving	Class Participation, assignment
1,7	7. Women in Islamic Economic Development: Place of women in Islam; Sphere of economic activities of women in Islam; role of women in economic development in Bangladesh; some observations and suggestions.	5	Lecture, Class discussion	Class Participation, assignment
Final Written Examination: All Chapter				

Reading Materials:

Ahmad, A. and Awan, K. R. (1992): Lectures on Islamic Economics, IRTI, Islamic Development Bank Jeddah.

Abdul Mannan, M. (1984). The Making of Islamic Economic Society-Islamic Dimensions in Economic Analysis. *Cairo: International Association of Islamic Banks.*

Course Title: Advanced Macroeconomics

Course Description

This course presents an in-depth analysis of advanced macroeconomic theory which is intended to help students to understand important macroeconomic issues such as structural unemployment and real-wage rigidity, exogenous/endogenous expectations, the Mundel Fleming model, small open economy, models of aggregate supply and aggregate demand, stabilization policies, etc. It also introduces students to important macroeconomic techniques such as macro-dynamics, which are commonly used in research. Hence, students will normally be exposed to the advanced theories, while those students who plan to pursue higher research in macroeconomics will be well equipped with the necessary theories and techniques.

Course Objective

The major objective of this course is

- to introduce the students with the foundations of advanced macroeconomic theories of an economy such as unemployment, rational expectations, aggregate demand, aggregate supply, stabilization policy, different growth models;
- to equip the students with empirical underpinnings of the stated theories in real world, adequately supplemented with suitable examples and references to different economies in history.

Course Learning Outcomes (CLO):

At the end of the course, the student will be able to-

1. understand the basic concepts of unemployment and its patterns.
2. understand the role of expectations and gain knowledge about the theories of exogenous/endogenous expectations in macroeconomics
3. study the advanced models of open economy macroeconomics
4. develop knowledge and understanding of theory and concepts of aggregate demand and aggregate supply.
5. gain knowledge about the theories of stabilization policies and its applications in real world.
6. develop an understanding of how different growth models function in an economy.
7. explore the basic neoclassical growth model.

Course Contents:

CLOs Mapping	Chapter	No. of lectures	Teaching Strategy	Assessment
1	1. Theory of unemployment: Job search and frictional unemployment; Real-wage rigidity and structural unemployment; Patterns of unemployment.	5	Lecture, Class discussion	Class Participation, assignment, Q/A session
2	2. The Rational Expectations: The basic model with exogenous/endogenous expectations; the frictionless neoclassical model of labour market; the market clearing approach: a new Keynesian alternative	6	Lecture, Class discussion	Class Participation, Q/A session

3,4	3. Aggregate demand in the open economy: The Mundel Fleming model; the small open economy under floating exchange rate; small open economy under fixed exchange rate interest rate differentials; the Mundell-Fleming model with a changing price level.	5	Lecture, Class discussion, problem solving	Class Participation, assignment,
Mid-term Written Examination: Chapter 1, 2, 3				
4	4. Models of aggregate supply: The sticky wage model; the imperfect information model, the sticky price model; inflation; unemployment and the Phillips curve.	5	Lecture, Class discussion, problem solving	Class Participation, Quiz
5	5. Stabilization policy: Active and passive policies; lags; ignorance; Lucas critique; policies by rule or discretion; policy in an uncertain world.	6	Lecture, Class discussion	Class Participation, assignment
6	6. Macro-dynamics and Growth models: The stylized facts of growth; basic assumptions of one-sector growth model; the Harrod-Domar model.	5	Lecture, Group discussion	Class Participation, class test, assignment, Quiz
7	7. The Basic Neoclassical Growth model: The constant-returns production model; equilibrium growth in the neoclassical model; the neoclassical model with technical progress; multiple equilibrium in the neoclassical model.	6	Lecture, Class discussion, Power-point presentation	Class Participation, Q/A session
Final Written Examination: All chapters				

Reading Materials

Dornbusch R. and S. Fischer (2000) *Macroeconomics*, 7th edition, McGraw-Hill.
 Nellis, J.G. and Parker, D. (2004). *Principles of Macroeconomics*, Prentice Hall.
 Mankiw, G. (2010). *Principles of Macroeconomics*, McGraw Hill.
 Samuelson, P.A. and Nordhaus, W.D. (2010) *Economics*, McGraw-Hill.

Course Title: Econometrics

Course Description

Advanced Econometrics introduces students to advanced techniques in econometric modeling. In the course students will study applied methods for model selection, implementation, and inference for cross sectional, time series, and panel data. Topics will include 2SLS, 3SLS, Maximum Likelihood, dummy variables, and dummy dependent variables models as well as time series analysis. The major emphasis will be given on understanding these models from an intuitive perspective and estimating them as well.

Course Objective

The objective of this course is

- to enable students to develop the analytical and empirical skills necessary to understand the formulation of economic theory;
- to enable them to formally represent economic relationships using mathematical and econometric tools and provide meaningful interpretations of these representations;
- to analyze empirical economic relationships using 2SLS, 3SLS, or Maximum Likelihood techniques;
- to develop the analytical and empirical skills relating to dummy variables and dummy dependent variables.

Course Learning Outcomes (CLO):

At the end of the course, the student will be able to-

1. understand the concepts of advanced econometric theories and techniques;
2. demonstrates the applications of 2SLS, 3SLS, and Maximum Likelihood analysis.
3. formally represent economic relationships using mathematical and econometric tools and provide meaningful interpretations of these representations;
4. enable the students to gain knowledge and skills in handling different types of econometric data with the help of econometric tools.
5. understand and critically evaluate empirical studies in the literature and to perform econometric analysis.

Course Contents:

CLOs Mapping	Chapter	No. of lectures	Teaching Strategy	Assessment
1,4,5	1. Simultaneous Equation Systems and Identification: Review of single equation model; the nature of simultaneous equation models; consistency of OLS; the simultaneous-equation bias—solution to the simultaneous-equation bias. The problem of identification—implications of the identification problem—rules of identification.	5	Lecture, Class discussion, problem solving	Class Participation, Q/A session
1,2,3,5	2. Two-Stage Least Squares (2SLS) Method: Over identified equation and application of 2SLS, properties of the 2SLS model.	5	Lecture, Class discussion, problem solving	Class Participation, Q/A session

1,2,3,5	3. Three-Stage Least Squares (3SLS) Method: 3SLS as an extension of 2SLS method, properties of the 3SLS model.	5	Lecture, Class discussion, problem solving	Class Participation, Quiz, Q/A session
Mid-term Written Examination: Chapter 1, 2, 3				
1,2,3,5	4. Maximum Likelihood methods: Introduction to maximum likelihood estimation—Limited information maximum likelihood method (LIML) method, Full information maximum likelihood method (FIML) method.	5	Lecture, Class discussion, problem solving	Class Participation, assignment, Q/A session
1,2,3,5	5. Regression on dummy variables and dummy dependent variables: The nature of dummy variables, use of dummy variables and dummy dependent variables, the dummy variable trap, The linear probability model (LPM), the logit model, and the probit model.	6	Lecture, Class discussion, problem solving	Class Participation, class test, assignment
1,4,5	6. Distributed-Lag Models: Role of time or lag in economics—the reasons for lags— Estimation of distributed-lag models.	5	Lecture, Class discussion, problem solving	Class Participation, Q/A session
1,4,5	7. Time series econometrics: Stationary and non-stationary time series, test of stationary— unit root test and co-integration test; error correction model-some applications	5	Lecture, Class discussion, problem solving	Class Participation, assignment
Final Written Examination: All chapters				

Reading Materials

Gujarati, D. N. (2004). “Basic Econometrics”, 4th Edition, The McGraw-Hill Companies.

Wooldridge J. M. (2009). “Introductory Econometrics. A Modern Approach”, 6th Edition, Cengage Learning.

Maddala, G. S., 2009. Introduction to Econometrics. John Wiley, Fourth Edition.

Verbeek, M. (2008), A Guide to Modern Econometrics, 3rd ed., Wiley

Course Title: International Economics

Course Description

This course will provide with the knowledge as well as a critical awareness of the integration of theory, data and analysis in relation to the international economics. Students are therefore exposed to the theories with which to understand international trade patterns, examine trade policies, and analyze the determinants of exchange rates and financial crises. In addition, students will also learn the trade patterns and the trade policy of Bangladesh.

Course Objective

The objective of this course is

- to provide an understanding of the underlying premises of different international trade models;
- to focus on the trade policies and institutions shaping global trade;
- to provide a broader historical and theoretical context on trade patterns and trade policies of Bangladesh.

Course Learning Outcomes (CLO):

At the end of the course, the student will be able to-

1. learn about the classical trade models in money terms, classical trade model for multiple goods and multiple countries;
2. gain insight about the empirical relevance of Ricardo's model;
3. become familiar with the empirical test of Heckscher Ohlin theorem and various alternative trade theories;
4. apply various instruments of trade policies and to gain knowledge about the costs and benefits of imposition of tariff, and about the advantages and disadvantages of free trade.
5. be acquainted with the historical patterns of trade policy in Bangladesh and be able to construct policies suitable to the country in future.

Course Contents:

CLOs Mapping	Chapter	No. of lectures	Teaching Strategy	Assessment
1,2	1. The Two Sector Models of Trade: Ricardian model-determination of trade pattern and wages; some empirical results; misconception about the model; evaluation of the model; applicability of the model the present day world.	6	Lecture, Class discussion	Class Participation, Q/A session
3	2. Trade between Dissimilar Countries: Insights from the factor proportion theory of trade- Heckscher-Ohlin model; the Rybczynsky theorem; the factor price equalization theorem; the Stolper-Samuelson theorem, test of the model- the Leontief paradox and its aftermath; factor content version of the Heckscher- Ohlin theorem- the Heckscher- Ohlin- Venek (HOV) model.	5	Lecture, Class discussion, problem solving	Class Participation, Q/A session, class test
4	3. Trade between Similar Countries: Economics of scale and trade; imperfect	5	Lecture, Class	Class Participation,

	competition and trade; the theory of external economies and trade; Alternative theories of trade- availability theory; vent for surplus theory; technological gape and product cycle model; international factor movement and the theory of multinationals.		discussion, problem solving	Q/A session, assignment
Mid-term Written Examination: Chapter 1, 2, 3				
4	4. International Trade Policy: Tariff analysis in general equilibrium framework; analysis of import quotas and export subsidies; non-tariff trade barriers- anti-dumping duties, the voluntary export restraints, counter veiling duties.	6	Lecture, Group discussion	Class Participation, Q/A session, Quiz
4	5. International Monetary System: Present International Monetary System, Current IMF Operation, problems with present exchange rate arrangements, proposal for reform, and other current international economic problems.	5	Lecture, Class discussion	Class Participation, Class presentation
4,5	6. International trade and economic growth: The effect of economic growth on trade; Dutch disease; immiserising growth; trade policies in developing countries; primary product export; deteriorating terms of trade; alternative trade policies for developing countries.	5	Lecture, Class discussion, Power-point presentation	Class Participation, class test
5	7. WTO and Bangladesh Trade Policy: International trading system and the WTO, Components of WTO agreement- GATS, four models of service supply under GATS; Evaluation of Bangladesh trade policy and way forward.	5	Lecture, Class discussion	Class Participation, assignment
Final Written Examination: All chapters				

Reading Materials

Krugman, P. R., Obstfeld, M. and Melitz, M. J. (2012). *International Economics: Theory & Policy*, 9th edition. Addison- Wesley.

Appleyard, D. R. and Field, Jr., A. J. (2014). *International Economics*, 8th edition. McGraw-Hill Irwin.

Salvatore, D. (2001): *International economics*, 7th edition, John Willey.

Course Title: Environmental Economics**Course Description**

The environment is one of the most important and most debated modern policy issues. This course provides an economic view on this argument by analyzing the interdependencies between the environment and the economy by covering topics such as theories of renewable and non-renewable resources, methods of pollution control, the theory of sustainable development and so on. Hence, the reasons behind the existence of environmental problems, the failure of unregulated markets within this context, and the possible solutions to these problems will be discussed thoroughly. Moreover, this course will help students to take part in the environmental policy making discussions from an economic perspective.

Course Objective

The objective of the course is

- to develop economic perspectives on modern environmental issues and to apply economic theory;
- emphasis will be given on topics such as welfare economics, non-renewable resources and its exploitation, economics of renewable resources like forestry, pollution control policies, the Coase theorem, the sustainable development and so on.
- to address global and local environmental problems and to apply market and non-market method for resolving environmental problems.

Course Learning Outcomes (CLO):

At the end of the course, the student will be able to-

1. identify dynamic resource utilisation problems in the context of renewable and non-renewable resources and understand the institutional economic approach to resource management
2. apply environmental economics for finding solutions to serious environmental problems like global warming, earth, air and water pollution at different scales such as global, regional and local.
3. acquire the basic skills and knowledge required in the natural resource management of a country for a sustainable existence.

Course Contents:

CLOs Mapping	Chapter	No. of lectures	Teaching Strategy	Assessment
1,2	1. Environment and Welfare Economics: The efficiency allocation of resources; social welfare function and optimality; achieving an efficient allocation in a market economy.	5	Lecture, Class discussion , problem solving	Class Participation, class test, assignment,
1,2	2. Principles of Non-Renewable Resource Exploitation: Basic model of optimal exploitation; competitive ownership and resource exploitation; varying resource grades and sequential depletion; effect of set-up costs and the depletion path.	6	Lecture, Class discussion , problem solving	Class Participation, class test, assignment,
1,2	3. Economics of Renewable Resource: Meaning of forest resources; optimal timber cutting decision; optimality under different alternative situations.	5	Lecture, Class discussion , problem solving	Class Participation, class test, assignment, Quiz

Mid-term Written Examination: Chapter 1, 2, 3				
1,2	4. Economics of Pollution Control; Static and dynamic requirements for efficient levels of flow and stock pollution; property rights and bargaining- the Coase theorem; assessing pollution control policies, pollution control policies in practice, environmental laws, regulations and green tax in Bangladesh; managing environmental problems- the case of air, water and solid waste in Bangladesh.	5	Lecture, Class discussion , problem solving	Class Participation, class test, assignment ,
1,2,3	5. The Economics of Sustainable Development: Discounting the future; meaning of sustainability; possible sustainability rules; indicators of sustainability; the Common Perring's model of sustainable development.	6	Lecture, Class discussion , problem solving	Class Participation, class test, assignment ,
1,2,3	6. Valuation of Environmental Resources: Introduction; dimensions of value; economic valuation of environmental resource stock and flows; compensating and equivalent variations and surpluses; willingness to pay and willingness to accept; hedonic pricing.	5	Lecture, Class discussion , problem solving	Class Participation, class test, assignment , Quiz
1,2,3	7. Sustainable development: The end of economic growth, the steady-state economy, the concept of sustainable development, the economics of sustainable development reforming global institutions, new goals and new production methods, achievements of MDGs in Bangladesh- particularly Goal 7, the 2030 agenda for sustainable development.	6	Lecture, Class discussion , problem solving	Class Participation, class test, assignment , Q/A session, Quiz
Final Written Examination: All chapters				

Reading Materials

- Anderson, D. A. (2013). *Environmental economics and natural resource management*: Routledge.
- Harris, J. M., & Roach, B. (2013). *Environmental and natural resource economics: A contemporary approach*: ME Sharpe.
- Hussen, A. M. (2000). *Principles of Environmental Economics: Economics, Ecology and Public Policy*: Routledge.
- Hussen, A. M. (2004). *Principles of environmental economics*: Psychology Press.
- Keohane, N. O., & Olmstead, S. M. (2007). *Markets and the Environment*: Cambridge Univ Press.
- Roger, P., Yue, M., James, M., & Michael, C. (2003). *Natural resource and environmental Economics*: Pearson Education Limited.

Course Title: Economic Thought

Course Description

Considering that numerous frameworks exist that give diverse conceptualizations of the individual-economy-society interaction, this course aims to introduce students to an understanding of how economic thought has evolved over time. It will familiarize students with different schools of economic thought and introduce students to the work of key players in the history of Economics. The course will start with a look at Classical Economic Thoughts and their critiques, after which the course will examine the works of Alfred Marshall and J.M. Keynes. Moreover, the works of the twentieth century economists will be explored. The course also delves into the work of the Islamic Economists.

Course Objective

The objective of this course is-

- To provide students with an overview of the evolution of economic theory from the distant past to the twentieth century.
- To be familiarized the challenges that economists have confronted and attempted to answer throughout history

Course Learning Outcomes (CLO):

At the end of the course, the student will be able to-

1. give a detailed account on the development of economic thought in a global perspective
2. have a good understanding on various traditions and schools of economics, which influenced the shaping of present world in its current state
3. be able to evaluate the similarities and differences among the works of different economists.

Course Contents:

CLOs Mapping	Chapter	No. of lectures	Teaching Strategy	Assessment
1,2,3	1. Classical Economic Thoughts: The classical economic ideas of Adam Smith, David Ricardo, Robert Malthus, and J. S. Mill.	6	Lecture, Class discussion, problem solving	Class Participation, class test, assignment
1,2,3	2. Critiques of the Classical Views: Early socialism--Sismondi; Saint Simon; Robert Owen; Louis Bane; Rodbertas; Karl Marx and his views	5	Lecture, Class discussion, problem solving	Class Participation, class test, assignment
1,2,3	3. Subjectivism, Marginalism and Institutionalism: Gossen; Jevons; Karl Menger; Bohm-Bawerk; Leon Walras and Thorstein Veblen.	5	Lecture, Class discussion, problem solving	Class Participation, class test, assignment
Mid-term Written Examination: Chapter 1, 2, 3				
1,2,3	4. Economic Ideas of Alfred Marshall: His contribution to value theory, consumer's and producer's surplus, theory of welfare	6	Lecture, Class discussion, problem solving	Class Participation, class test, Q/A session,
1,2,3	5. New Economics of J. M. Keynes: Keynes's view on wages and spending, fiscal policy, multiplier effect and	5	Lecture, Class discussion, problem solving	Class Participation, class test,

	redistribution.			assignment,
1,2,3	6. Twentieth Century Economic Thoughts: J R Hicks; post Keynesian ideas; Chamberlin and J Robinson's analyses; Milton Friedman and Chicago school.	6	Lecture, Class discussion, problem solving	Class Participation , class test, assignment, Quiz
1,2,3	7. Islamic Economic Ideas: Islamic ideas of IbnKhalidun, IbnTaimiyah, Ibn Al-Quayyim, Al-Ghazzagali, Al-Mqrizi and others	6	Lecture, Class discussion, problem solving	Class Participation , class test, assignment, Quiz
Final Written Examination: All chapters				

Reading Materials

Bernstein, H. (2010). Class dynamics of agrarian change (Vol. 1). Kumarian Press.

Haney, L, H (1977), History of Economic Thought. New York, McMillan.

Hunt E K and Mark Lautzenheiser (2011), History of Economic Thought, 3rd Edition. NY and London, Armonk.

Islahi, A. A. (2014). History of Islamic Economic Thought: Contributions of Muslim Scholars to Economic Thought and Analysis. Edward Elgar Publishing.

Lokanathan V. (2018). A History of Economic Thought, 10th Edition, S. Chand Publishing. Roll, E. (1938). *History of economic thought*. faber and faber, London.

Course Code: ECO 5206

Course Credit: 3

2nd Semester

Course Title: Labour Economics

Course Description

In general, Labor Economics is the study of labor markets, labor market institutions, public policy of labor market issues, the wage structure, and the economics of human resource management. The course combines microeconomic and macroeconomic theories, developed to understand how the labor market works, with the empirical analysis and policy evaluation of the labor market. In particular, this course is oriented toward basic theories that will help to understand how practical business and economic decisions involving labor should be made.

Course Objective

The objective of this course is-

- To introduce students to the economic analysis of the labor market. This involves understanding of the determinants of the observed structure of demand and supply of labor and how equilibrium in the labor market can be achieved.
- To provide the core concepts of trade unions and of the tools used by the govt. in labor market.

Course Learning Outcomes (CLO):

At the end of the course, the student will be able to-

1. gain insights on the theoretical as well as empirical issues pertaining to labor market, wage theories, employment policies, trade unions etc
2. develop skills for analyzing problems in the labor market and for setting appropriate strategies for the smooth functioning of the labor market.
3. be able to assess how government's policies could affect the decisions of the individual as well as the decisions of the firm.

Course Contents:

CLOs Mapping	Chapter	No. of lectures	Teaching Strategy	Assessment
1,2	1. Labour Economics: Introduction; importance of labour economics; the ‘old’ and ‘new’ concept; labour economics as a subsystem of the economic system; payoffs.	6	Lecture, Class discussion, problem solving	Class Participation, class test, assignment,
1,2	2. Demand for Labour: Short-run demand for labour; perfectly competitive seller; imperfectly competitive seller; imperfectly competitive seller; long-run demand for labour; market demand for labour; elasticity of labour demand.	6	Lecture, Class discussion, problem solving	Class Participation, class test, assignment,
1,2	3. Supply of Labour: Supply of labour in the short run; work-leisure decision- basic model; income and substitution effect; rational for back-ward bending supply curve; empirical evidence; elasticity versus changes in labour supply.	5.	Lecture, Class discussion, problem solving	Class Participation, class test, assignment,
Mid-term Written Examination: Chapter 1, 2, 3				
1,2	4. Equilibrium in Labour Market: Equilibrium in a perfectly competitive labour market; wage and employment determination- monopoly in the product market; monopony in the labour market; union techniques to raise wages.	5.	Lecture, Class discussion, problem solving	Class Participation , class test, Quiz
1,2	5. Trade Unionism: Introduction; collective bargaining- a special transaction; a model of the bargaining process; the union wage advantage; measuring the wage advantage; spillover effects; threat effect; other effects.	6	Lecture, Class discussion, problem solving	Class Participation , class test, Q/A session, Quiz
1,2,3	6. Government Intervention in the Labour Market: The reasons of government regulation; wage and hour legislation; income security measures; occupational licensing; occupational safety and health.	5	Lecture, Class discussion, problem solving	Class Participation , class test, Q/A session,
1,2	7. The Labor Market of Bangladesh: Labor force and employment in Bangladesh; Formal and informal sector employment, Wage determination, Market Policies	5	Lecture, Class discussion, problem solving	Class Participation , class test, Q/A session,
Final Written Examination: All chapters				

Reading Materials

Mcconnel, Brue and David Macpherson (2015) Contemporary Labour Economics, Eleventh Edition, London, Great Britain.

Ray Marshall, Vernon M. Briggs Jr. (1989) Labor Economics: Theory, Institutions, and Public Policy, sixth Edition

Don Bellante and Mark Jackson (1987) Labour Economics, Second Edition, Published by McGraw-Hill, New York, United State of America.

George J. Borjas (2013) Labour Economics, Sixth Edition, Published by McGraw-Hill, New York, United State of America.

Course Code: ECO 5207 **Course Credit: 3** **2nd Semester**

Course Title: Industrial Economics

Course Description

This course provides an introduction to current theory and empirical work in Industrial economics. It starts by introducing the perspective of industrial economics. It then moves on to the analysis of various aspects of industrial structure such as industrial power and diversification, industry location, investment decisions and market structure. Finally, it discusses the role of government regulation in the context of industry with reference to Bangladesh. The importance will be given on understanding how the theoretical tools can be used to analyze real world issues.

Course Objective

The objective of the course is-

- To familiarize students with a broad range of the methods and models applied by economists in the analysis of firms and industries.
- To provide students with the analytical skills required for understanding problems in industrial economics and the probable solutions to these problems.

Course Learning Outcomes (CLO):at the end of the course, the student will be able to-

1. understand basic concepts related to the behavior of firms and industrial organizations and how they can be applied to policy issues.
2. be able to perform the operative implications of these basic concepts to solve problems related to industry in a systematic manner.
3. be able to evaluate the key issues in the govt. regulation of industry.

Course Contents:

CLOs Mapping	Chapter	No. of lectures	Teaching Strategy	Assessment
1,2	1. Perspective of Industrial Economics: The scope of the industrial economics; a framework of industrial economics; the early theory of firm; monopolistic competition; passive and active behavior of firms.	5	Lecture, Class discussion, problem solving	Class Participation, class test, assignment
1,2	2. Concentration of Industrial Power and Diversification: Definitions; measurement of market concentration and monopoly power; extent of market concentration; concentration and market performance of a firm; motives for diversification; diversification and merger; measurement approaches; implication of public policies.	6	Lecture, Class discussion, problem solving	Class Participation, class test, , Q/A session,

1,2	3. Location of Industry: Determinants of industrial location approaches to industrial location analysis; operational approaches to industrial location; industrial location trends in Bangladesh	5	Lecture, Class discussion, problem solving	Class Participation, class test, assignment
Mid-term Written Examination: Chapter 1, 2, 3				
1,2	4. Industrial Investment Decision: Investment decisions; nature and type of investment decisions; a framework for analyzing investment behavior; the theory of investment; empirical studies of investment; government policy impact; the investment decision process.	6	Lecture, Class discussion, problem solving	Class Participation, class test, assignment,
1,2	5. Industrial Finance: Need for industrial finance; types of finance; sources of finance; flow and costs of funds; financial organization and intermediaries; analysis of financial decision; contribution of various sources of finance in Bangladesh; choice of funding-internal vs external sources.	5	Lecture, Class discussion, problem solving	Class Participation, class test, Q/A session,
1,2	6. Market Structure, Entry and Exit: Measurement of seller concentration; entry conditions and market structure; product differentiation as a barrier to entry; financial markets; empirical studies of market structure; entry; exit; empirical studies of entry and exist.	6	Lecture, Class discussion, problem solving	Class Participation, class test, assignment,
1,2,3	7. Government Regulation of Industry: Need for government regulation in industry; ways and means of government regulation in industries; legal framework of industrial regulation in developing countries with reference to Bangladesh.	5	Lecture, Class discussion, problem solving	Class Participation, class test, Q/A session,
Final Written Examination: All chapters				

Reading Materials

- Barthwal, R.R., 2004. *Industrial Economics - An Introductory Textbook*, New Age International Publishers.
- Hay, D.A. and D. J. Morris, 1991. *Industrial Economics and Organization: Theory and Practice*, International Student Edition.
- Martin, S. 1989. *Industrial Economics: Economic Analysis and Public Policy*, Macmillan Publishing Co.
- Martin, S. 1993. *Advanced Industrial Economics*, Oxford, Blackwell

Course Title: Comprehensive Viva

Course Title: M.S.S. Thesis

Course Description

The students, willing to do a thesis, must do specified economic research through a literature review and demonstrate that he or she has the necessary knowledge to critically examine and summarize the thesis topic. This course will help students to improve their independent research, writing, and presenting abilities, as well as their ability to apply economic and/or statistical and econometric analysis to a specific economics issue. There will be a thesis supervisor who will guide the student to complete the research. A thesis must be defended in person by the student in front of the Final Examination Committee consisting of 3 to 5 members.

Course Objective

The objective of this course is-

- To allow students to explore and learn how to confront economic theory with real-world data and mapping those theories into coherent explanations of real-world problems.
- To make students enable to critically analyze and examine existing theories of economics and generalize the relationships among economic variables from empirical phenomena.

Course Learning Outcomes (CLO):

At the end of the course, the student will be able to-

1. develop a specialist knowledge in the chosen area of research study.
2. initiate research and to formulate viable research questions.
3. be able to design, conduct and report sustained and original research.
4. be able to evaluate research-based and scholarly literature.
5. be able to present research findings and argument in a suitably structured and sequenced thesis that conforms to Department Protocols.
6. carry out a written and an oral reporting of research questions, method, analysis and conclusions.

Structure of Thesis

A thesis starts with an **Introduction** chapter which contains background to the topic; brief review of current knowledge and statement of the problem; the research questions and corresponding objectives of the research; may include hypotheses; justification of the research and an outline of the following chapters. There will be a **Literature Review** chapter which contains an in-depth and critical evaluation of the previous studies related to the topic and gaps found in these studies. The **Methodology** chapter will describe how the research process has been conducted. This chapter will therefore include the overall approach and type of research, data collection method, sampling techniques, details of study area, methods of analyzing data, tools and materials used during collection and analysis, etc. Following this, the **Results** chapter will present the results found from the collected data that are relevant to the research questions through appropriate descriptive statistics and inferential statistics. Interpretation and validation of results should also be presented in this chapter. Finally, the **Conclusion** chapter will describe the major findings and contributions of the research. This chapter may also include recommendations for future research and policy makers.