SUBJECT TITLE: Population and Health Economics (242211)
COURSE TEACHER: MD. Alhaj Uddin (T-9) & Shimul Kumar (T-11)

Chapter No & Chapter Title	Number of Classes with Class Title	Learning Outcomes At the end of the class, the students would be able to
1. Introduction to Health Economics (T-11)	1. Subject matter of Health Economics,	1. **Define** health economics and its key terms. 2. **Identify** the main areas covered under health economics. 3. **Analyze** the role of economics in understanding health care systems. 4. **Evaluate** the importance of health economics in policymaking.
	2. Application of economics to health and health care, is health care different.	1. **Explain** how economic principles apply to health and health care. 2. **Describe** key features that make health care different from other goods. 3. **Compare** health care markets with traditional markets in economics. 4. **Assess** the implications of health care's uniqueness for economic policy and decision-making.
Documentary	3. Documentary_01	1. Relate real world connection.
	4. Documentary_02	1. Relate real world connection.
2. Health Production (T-9)	5. Determinants of health.	1. Identify and explain key determinants of health, including socioeconomic, environmental, behavioral, and genetic factors. 2. Analyze how individual and societal choices influence health outcomes across different populations.
	6. Health production function	1. Describe the health production function and its role in understanding the relationship between healthcare inputs and health outcomes. 2. Evaluate how changes in inputs such as medical care, nutrition, and education affect individual and population health.
	7. Health equity and resource allocation.	1. Apply economic models to illustrate the marginal returns of health investments and diminishing returns in health production. 2. Assess policy implications of the health production function for improving health equity and resource allocation.

3. **Demand for Health** **(T-11)**	8. The demand for health, labor-leisure trade-offs.	1. **Define** the concept of demand for health in economic terms. 2. **Explain** the labor-leisure trade-off in individual decision-making. 3. **Analyze** how individuals allocate time between work, leisure, and health production. 4. **Evaluate** the impact of income and health status on labor-leisure choices.
	9. Investment/consumption aspects of health.	1. **Define** health as both an investment and a consumption good. 2. **Describe** the benefits of consuming health for immediate well-being. 3. **Analyze** how individuals make decisions about investing in health over time. 4. **Evaluate** the long-term economic returns of health investment.
	10. The demand for health capital, an integrated framework of Grossman model.	1. **Define** health capital in the context of the Grossman model. 2. **Describe** the key components of the Grossman model. 3. **Analyze** how the Grossman model explains individual demand for health. 4. **Evaluate** the effects of age, income, and education on health capital decisions.
4. **Asymmetric Information and Agency, Supplier Induced Demand** **(T-9)**	11. Asymmetric information.	1. Explain the concept of asymmetric information in health care markets and its implications for patient-provider relationships. 2. Describe the agency relationship in health care and evaluate how it contributes to potential conflicts of interest between providers and patients.
	12. Supplier-Induced Demand (SID).	1. Define Supplier-Induced Demand (SID) and explain the rationale for its consideration in health economics. 2. Interpret and compare different theoretical models of SID, including the target income model, disutility of discretion model, and profit-maximizing model.
	13. Price rigidities in facilitating.	1. Assess the role of price rigidities in facilitating or limiting SID in regulated health care markets. 2. Analyze how SID affects health care utilization, efficiency, and equity under various health system structures.
	14. Consumer behavior and demand for health services.	1. Examine the role of advertising in the health care market and its impact on consumer behavior and demand for health services.

		2. Evaluate the concept of the optimum level of advertising in health care from both an economic efficiency and public health perspective.
5. **Health Care Financing** **(T-11)**	15. Risk and insurance, demand for insurance	1. **Define** risk and insurance in economic terms. 2. **Explain** why individuals demand insurance. 3. **Analyze** how risk aversion influences insurance decisions. 4. **Evaluate** the role of insurance in managing health-related financial risks.
	16. Supply of insurance, the case of moral hazard,	1. **Define** the supply of insurance and moral hazard. 2. **Describe** how moral hazard arises in insurance markets 3. **Analyze** the impact of moral hazard on insurance providers. 4. **Evaluate** strategies to reduce moral hazard in health insurance.
	17. Coinsurance and deductibles.	1. **Define** coinsurance and deductibles in health insurance. 2. **Identify** the purpose of coinsurance and deductibles in a policy. 3. **Analyze** how coinsurance and deductibles affect consumer behavior. 4. **Evaluate** their role in controlling health care costs and reducing moral hazard.
6. **Equity, Efficiency** **(T-9)**	18. Efficiency and competitive markets	1. Explain the concepts of allocative and productive efficiency in the context of competitive markets and their relevance to health care delivery. 2. Evaluate the role of competitive market structures in improving efficiency and innovation in the health care sector.
	19. Promoting competition in the health sector.	1. Identify challenges and barriers to effective competition in health care markets, including issues related to information asymmetry and market power. 2. Analyze policy approaches aimed at promoting competition in the health sector and their potential impact on cost, quality, and access.
	20. Principles of equality and equity in health.	1. Distinguish between the principles of equality and equity in health and assess their implications for health policy and service delivery. 2. Define the concept of health care need and explain how it informs equitable resource allocation and priority setting.

	21. Models of need-based distribution in health care systems & efficiency and Equity in health care decision-making.	1. Assess different models of need-based distribution in health care systems and their effectiveness in achieving health equity. 2. Apply ethical and economic frameworks to evaluate trade-offs between efficiency and equity in health care decision-making.
	22. Total Chapter.	1. Summarize total chapter
	23. Quiz	2. Evaluate Formative assessment.
7. Economic Evaluation of Health Care (T-11)	24. Quantification of Benefits and Monetary Valuation of Health Benefits: (A) Cost analysis: Fixed and variable.	1. **Define** fixed and variable costs in health care cost analysis. 2. **Explain** the importance of cost analysis in evaluating health benefits. 3. **Analyze** health interventions using fixed and variable cost breakdowns. 4. **Evaluate** the monetary value of health benefits through cost analysis methods.
	25. Recurrent and capital, opportunity cost, animalization, discounting. (B) Cost-benefit analysis (CBA).	1. **Define** recurrent and capital costs, opportunity cost, annualization, and discounting. 2. **Describe** the basic concept and purpose of cost-benefit analysis (CBA). 3. **Analyze** the role of discounting and opportunity cost in evaluating health projects. 4. **Evaluate** health interventions using cost-benefit analysis principles.
	26. Concept and methods of conducting CBA. (C) Cost-effectiveness analysis (CEA): Concept, measuring incremental cost-effectiveness ratio, measuring Disability Adjusted Life Years (DALY).	1. **Define** cost-benefit analysis (CBA) and cost-effectiveness analysis (CEA). 2. **Describe** DALY and incremental cost-effectiveness ratio (ICER). 3. **Analyze** health interventions using CEA and CBA frameworks. 4. **Evaluate** the cost-effectiveness of programs based on DALY and ICER calculations.
	27. (D) Cost-utility analysis (CUA): Concept of quality in health care provision, Measuring Quality-Adjusted Life Years (QALYs), Is CUA different from CEA?	1. **Define** cost-utility analysis (CUA) and quality-adjusted life years (QALYs). 2. **Describe** the concept of quality in health care provision. 3. **Analyze** how CUA differs from cost-effectiveness analysis (CEA). 4. **Evaluate** the use of QALYs in measuring health outcomes and guiding health policy.