

## 9. Third-Year Course Structure and Course Contents (Intakes: 2019 & 2020                      Sessions: 2021-22 & 2022-23)

### 9A. Course Structure

**Total: 700 Marks (28 Credits)**

Course Code	Course Title	Contact Hours Per Week	Credit Hours	Marks
ECON 301	Advanced Microeconomic Theory	4 + 0	04	100
ECON 302	Advanced Macroeconomic Theory	4 + 0	04	100
ECON 303	Mathematical Economics	4 + 0	04	100
ECON 304	Introduction to Econometrics	4 + 0	04	100
ECON 305	Economic Growth, Development, and Planning	4 + 0	04	100
<b>Plus Any Two Courses from the Following</b>				
ECON 306	Economics in Islam	4 + 0	04	100
ECON 307	Industrial Economics	4 + 0	04	100
ECON 308	Health Economics	4 + 0	04	100

### 9B. Course Profile

#### ***ECON 301: Advanced Microeconomic Theory***

***Credit Hours: 04***

**Rationale:** Basic microeconomic courses focus on fundamental economic problems and pricing under perfectly competitive settings. Real economies are often far from perfect competition and require analyses based on modern methods such as game theory and general equilibrium. Students also need to understand the linkages among markets and how welfare is affected by various government policies. Advanced microeconomics deals with these types of problems.

**Prerequisites:** Basic Microeconomics, Mathematical Economics

**Course Objective:** The primary objective of the course is to acquaint students with some advanced topics of microeconomics that will enable them to deal with situations where markets are imperfect and analyze welfare implications of various government policies.

**Intended Learning Outcomes:** After successful completion of the course, students will be able to:

1. analyze decision making based on game theoretic approach;
2. understand pricing under monopoly, oligopoly and monopolistic competition;
3. explain determination of factor prices and distribution of income under various types of market structure;
4. understand the linkages among markets; and
5. compare inter-personal utility from normative perspective and social welfare maximization.

#### **Course Content:**

1. **Game Theory and its Applications:** What is a game? Game theory and economics; Two-player game; Nash equilibrium; Prisoner's dilemma; Sequential game; Pure strategies and mixed strategies.
2. **Pricing of Products:** Product pricing under perfect competition; Shut-down analysis; Constant, increasing and decreasing cost industry; Product pricing under imperfect competition- equilibrium under monopoly, Models of Oligopoly and Monopolistic Competition.
3. **Pricing of Factors and Income Distribution:** Demand for variable factor under perfect competition; Supply of variable factor under perfect competition; Equilibrium in factor market under perfect competition; Imperfect competition in product market and perfect; Competition in factor

market; Monopoly in product market and monopsony in factor market; Bilateral monopoly; Pricing of fixed factor.

4. **General Equilibrium:** Economic interdependence: general equilibrium; Existence of equilibrium; Uniqueness of equilibrium; Stability of equilibrium; Walrasian (2X2X2) general equilibrium model; Completeness of the Model.

5. **Welfare economics:** Normative issues in economics; Problems of value judgment; Welfare criteria; Optimality in production; Overall optimality; Social welfare function; Optimality of competitive equilibrium; Welfare Maximization; Market failure.

### Basic Text

Varian, H. R. (2019). *Intermediate Microeconomics: A Modern Approach*. New York: W. W. Norton and Company.

### Books Recommended

1. Browning, E. K., & Zupan, M. A. (2011). *Microeconomic Theory & Applications*. Hoboken, N.J: Wiley.
2. Harendra K. D. *Vyashtik Arthoniti: Tattva O Proyog*, Rural Economics Programme, Economics Department, Chittagong University.
3. Hirshleifer, J., & Sproul, M. (1988). *Price Theory and Applications*. Englewood Cliffs, N.J: Prentice Hall.
4. Islam, M. S. *Microeconomics with Simple Mathematics*, UGC, Dhaka
5. Koutsoyiannis, A. (2005). *Modern Microeconomics*. Palgrave Macmillan.
6. Lancaster, K. (1983). *Introduction to Modern Microeconomics*. Tunbridge Wells, Kent: Costello.
7. Lipsey, R. G., Courant, P. N., Purvis, D. D., & Steiner, P. O. (1993). *Economics*. New York, NY: HarperCollins Publishers.
8. Ryan, W. J. L., & Pearce, D. W. (1977). *Price Theory*. London: Macmillan.

## **ECON 302: Advanced Macroeconomic Theory**

**Credit Hours: 04**

**Rationale:** In modern times economies are interlinked through both goods market and money market. As a result, the effects of a business cycle in a country tend to propagate to other countries. Formulation of macroeconomic policies thus requires the knowledge of the nature of international dependence. Understanding the causes of business cycles and long-run economic growth makes economic policies more effective.

**Prerequisite:** Principles of Macroeconomics

**Course Objective:** The purpose of this course is to learn how economic shocks and policies originating in one region affect economic outcomes in other regions. Investigation of the effectiveness of policies under various economic environments is also an objective of this course.

**Intended Learning Outcomes:** After successful completion of the course, students will be able to:

1. understand the causes of economic fluctuations;
2. design policies to smooth out business cycles;
3. understand the theoretical debate among macroeconomists concerning the shape of the aggregate supply curve;
4. comprehend real business cycles and its implications for policies; and
5. understand the sources of wage rigidities.

### Course Content:

1. **The Open Economy Model:** Market for foreign exchange; Exchange rate regimes; Balance of Payments; Capital mobility; derivation of the BoP curve; Policy debates.
2. **Demand for Money:** Quantity Theory; Friedman's new quantity theory; Portfolio Theory.
3. **Supply of Money:**  $M_1$ ,  $M_2$ ,  $M_3$ ,  $M_4$ .