

**Department of Economics**  
**University of the Punjab, Lahore**  
**BS Economics (5th to 8th Semester)**  
**Detailed Scheme of Studies for BS 5<sup>th</sup> Semesters**  
**(Valid from 2021)**  
**Foundation Courses**

**Code: ECON-301**

**Title: Advanced Microeconomics**

**Credit Hours: 03**

**Prerequisite: Intermediate Microeconomics**

**Objectives:**

This course approaches microeconomic analysis at an advanced level, presenting some formal techniques used in economic research as well as critical perspectives and possible alternatives. The course covers the main topics of microeconomics from consumer and producer behavior, partial and general equilibrium, behavior under uncertainty, game theory and asymmetric information. The course is designed to make students comfortable with the tools and methods of microeconomic analysis and to teach how to structure and analyze problems on these areas from a quantitative perspective

**Course Contents**

**Choice under Uncertainty**

Gambles and Contingent Commodities, Applications of Contingent Commodities, Insurance, Diversification, Risk Spreading

**Game Theory**

Fundamentals of Game Theory, Payoff Matrix of a game, Nash Equilibrium, Mixed Strategies, Prisoner's Dilemma, Repeated Games, Application of Game Theory.

**Exchange**

The Edgeworth Box, Trade, Pareto Efficient Allocations, Market Trade, The Algebra of Equilibrium, Walras' Law, The Existence of Equilibrium, Equilibrium and Efficiency, The Algebra of Efficiency, Implications of the First Welfare Theorem, Implications of the Second Welfare Theorem

**Production**

The Robinson Crusoe Economy, Production and the First Welfare Theorem, Production and the Second Welfare Theorem, Production possibilities, Comparative Advantage, Pareto efficiency

**Welfare**

Aggregation of Preferences, Social Welfare Functions, Welfare Maximization, Individualistic

Social Welfare Functions, Fair Allocations, Envy and Equity

### **Asymmetric Information**

Problems Due to Asymmetric Information, Signaling and Screening, Education as a Signaling Model, Adverse Selection, Adverse Selection Problem in Insurance Markets and Labour Markets, Hidden Actions, Moral Hazard in Insurance Markets and Product Markets, Employer-Employee Relationships

### **Externalities and Public Goods**

Externalities, The Inefficiency of Competition with Externalities Supply-and-Demand Analysis, Cost-Benefit Analysis, Regulating Externalities Emissions Fees versus Standards under Uncertainty, Market Structure and Externalities Monopoly and Externalities Monopoly versus Competitive Welfare with Externalities, Taxing Externalities in Noncompetitive Markets, Allocating Property Rights to Reduce Externalities, Coase Theorem, Markets for Pollution, Open-Access Common Property, Overuse of Open-Access Common Property, Solving the Commons Problem, Public Goods, Types of Goods, Markets for Public Goods, Free Riding, Reducing Free Riding, Valuing Public Goods.

### **Recommended Books:**

- Perloff, J. M. (2013). *Microeconomics: Theory & Applications with Calculus*, 3rd Edition. Pearson Supplementary Texts
- Nicholson, W. & Snyder, C. (2009). *Intermediate Microeconomics and Its Application*, 11th Edition. Cengage Learning.
- Mas-Colell, A. (1995). *Microeconomic Theory*, Oxford University Press: New York.
- Mansfield, E., & Yoke, G. (2010), *Microeconomics*, 11th Ed. Viva Books: New York.
- Jehle, G. A. and Philip J. R. (2000). *Advanced Microeconomic Theory*, Second edition, Addison Wesley.
- Mas, Colell, A. Whinston, M. D. Green, J. R. (1995). *Microeconomic Theory*, Oxford University Press.