

Course Code: ECON-314

Title: Advanced Microeconomics

Credit Hours: 03

Prerequisite: Intermediate Microeconomics

Course Objectives:

This course approaches microeconomic analysis at an advanced level, presenting some formal techniques used in economic research. The course covers the main topics of microeconomics from consumer and producer behavior, 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

Learning Outcomes:

On completion of this course, students would be able to

- Explain how the consumers and producers will take decisions
- Understand the equilibrium states of consumer and producers in given economy states.
- Compare the modern cost theories with traditional cost theories.
- Analyze and study different market structures and compare the functioning of all the structures in the economy.

Course Contents:

Review of Consumer Behavior	Budget constraints, preferences, choice, inter-temporal choice, supply, equilibrium, perfectly competitive markets
Oligopoly	Choosing a Strategy: Quantity versus Price Leadership model, Comparing Price Leadership and Quantity Leadership, Introduction to Simultaneous Quantity Setting, Cournot Equilibrium, Simultaneous Price Setting, and Collusion.
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, Public Goods, Types of Goods, Markets for Public Goods, Allocating Property Rights to Reduce Externalities, Open-Access Common Property, Overuse of Open-Access Common Property, Solving the Commons Problem, Free Riding, Reducing Free Riding, Valuing Public Goods.

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 Labor Markets, Hidden Actions, Moral Hazard in Insurance Markets and Product Markets, Employer-Employee Relationships
Choice under Uncertainty	Gambles and Contingent Commodities, Applications of Contingent Commodities, Insurance, Diversification, Risk Spreading
Game Theory	Introduction to games, Nash equilibrium, pure strategies, mixed strategies, dominated actions, bargaining, formation of beliefs, extensive games with perfect information, Stackelberg's model of duopoly,

Teaching Methodology:

- To deliver lectures on topics included in course outline
- To require each student to solve independent assignments on topics included in the course.

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.