

DSC -II - PRINCIPLES OF MICROECONOMICS II

Course Description

The course is designed to provide a sound training in microeconomic theory to formally analyze the behaviour of individual agents. Since students are already familiar with the quantitative techniques in the previous semesters, mathematical tools are used to facilitate understanding of the basic concepts; this course looks at the behaviour of the consumer and the producer and also covers the behaviour of a competitive firm.

Module I: Consumer Theory I

The market – Constructing a model; Optimisation and equilibrium; The demand curve and the supply curve; Market Equilibrium; The budget constraint and budget set; Changes in budget line; Effect of taxes, subsidy and rationing on budget set; Consumer Preferences – Indifference curves; Case of perfect substitutes, complements, neutrals, satiation, discreet goods; The marginal rate of substitution; Utility – Cardinal utility; Constructing a utility function; Marginal utility and MRS; Optimal choice and consumer demand; Estimating Utility Functions; Implications of the MRS condition; Choosing taxes; Demand – Normal and inferior goods; Income Offer Curve and Engel Curve; Ordinary goods and Giffen goods; The Offer Curve and the demand Curve; The inverse demand function.

Module II: Consumer Theory II

Slutsky Equation – The Substitution and Income Effects; Sign of Substitution Effect; The Total Change in Demand; Rates of Change; The Law of Demand; Another Substitution Effect; Compensated Demand Curves; Consumer's Surplus – Demand for a discrete good; Constructing utility from demand; Other interpretations of consumer's surplus; Approximating continuous demand; Interpreting the change in consumer's surplus; Producer's surplus; Calculating gains and losses

Module III: Production Theory

Marginal Productivity, Isoquant Maps and the Rate of Technical Substitution, Production with One Variable Input (labour) and with Two-Variable Inputs, Returns to Scale, Four Simple Production Function (Linear, Fixed Proportions, Cobb-Duglas, CES), Technical Progress

Module IV: Cost Functions

Definition of Costs, Cost Functions and its Properties, Shift in Cost Curves, Cost in the Short-Run and Long-Run, Long-Run versus Short-Run Cost Curves, Production with Two Outputs – Economies of Scope

Module V: Profit Maximisation

The Nature and Behaviour of Firms, Profit Maximization, Marginal Revenue, Short-Run Supply by Price-Taking Firm, Profit Functions and its Properties

Readings:

1. C. Snyder and W. Nicholson (2012): Microeconomic Theory: Basic Principles and Extensions, 11th Edition, Cengage Learning, Delhi, India.
2. R. S. Pindyck, D. N. Rubinfeld and P. L. Meheta (2009): Microeconomics, 7th Edition, Pearson, New Delhi.
3. H. R. Varian (2010): Intermediate Microeconomics: A Modern Approach, 8th Edition, W.W. Norton and Company/Affiliated East-West Press (India). The workbook by Varian and Bergstrom may be used for problems