

**Eco. 305: Study Guide**  
**Part I: The Theory of Consumer Choice**

1. Consumer Preferences:

- The concept of utility, and cardinal versus ordinal measure of utility.
- Indifference curve and its salient properties.
- The slope of an indifference curve as a measure of *relative values* of any pair utility generating commodities (such as, apple vs. banana; leisure vs. income; present vs. future consumption) to a consumer.

2. Budget Constraints:

- The slope of a budget line as a measure of *relative price* or *market opportunity cost*.
- Factors causing a shift or rotation of a consumer budget line.

3. The Equi-marginal Principle.

4. The Calculus of Utility Maximization.

- Utility maximization as constrained optimization problem
- The Lagrange method

5. Derivation of the Individual Consumer Demand Curve

- The price consumption curve
- The income and substitution effect of a price change
- The link between the LAWS of demand, diminishing marginal rate of substitution and diminishing marginal utility
- The concept of an inferior and normal goods
- The Giffen Paradox

6. The Market Demand Curve

- From the individual to the market demand curve
- Price elasticity of demand
- Price elasticity and total revenue
- Other demand elasticities
- The concept of consumers surplus

## 7. The Supply of Labor

- The income-leisure model
- Wage as the market opportunity cost of leisure
- The income and substitution effects of a wage change.
- Why the labor supply curve of an individual household may be backward bending
- Market supply curve for labor

## 8. The Supply of Saving.

- Preference function for time dated commodities—present versus future consumption.
- Intertemporal budget constraint
- The role of market interest rate in the optimal saving decision of a household

## 9. Static and Comparative Static Equilibrium Analysis

- Static equilibrium—any attempt to explain how a given equilibrium condition is attained or reached. For example, why our familiar utility maximizing condition  $MRS_{x/y} = P_x/P_y$  constitutes equilibrium.
- Comparative static equilibrium—deals with an analysis of how an equilibrium is restored after a disturbance to an initial equilibrium position resulting from an external (exogenous) shock. For example, suppose a utility maximizing consumer is in a state of equilibrium; more specifically the  $MRS_{x/y} = P_x/P_y = 2$ . In addition, let us suppose that the market price for commodity X (which is not under the control of the individual consumer) suddenly increases while the price for  $P_y$  remains unchanged. Thus, immediately afterwards, the consumer will no longer be in equilibrium since  $MRS_{x/y} < 2$ . Now, the question is how will a utility maximizing consumer adjust the combination of the commodities X and Y that she utilizes so equilibrium is restored? A systematic effort to answer this type of question requires a comparative static equilibrium analysis.