SAUDER
School of Business

Real Estate Division

UBC Real Estate Division
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BUSI 100 Micro Foundations of Real Estate Economics

PURPOSE AND SCOPE

The *Micro Foundations of Real Estate Economics* course BUSI 100 is intended to acquaint the student with the basic principles of microeconomics and to give them the tools necessary to apply these principles to situations within real estate markets. The courses will immerse the student in the analysis of basic microeconomic principles as they relate to demand, supply, production, competitive environments, and other topics.

After reading the text and completing the lessons and assignments found in the course workbook, the student should have a basic understanding of microeconomic concepts. Listed below are general objectives for what a student should learn from this course:

- Understand the relevance and importance of economics in business, and in particular in real estate.
- Understand the difference between microeconomics and macroeconomics.
- Understand key economic terms and concepts: opportunity cost, specialization, supply and demand, marginalism, the invisible hand, and market failures**.**
- Understand how economic analysis examines real life concepts in an abstract, mathematical manner.
- Understand and explain the fundamental concept of scarcity in economics.
- Understand and explain the following standard mechanics of demand and supply analysis:
    - demand and supply curves
    - equilibrium
    - shortages and surpluses
    - ceteris paribus assumption
    - shifts in demand and supply curves
    - substitutes and complements
- Understand and explain elasticity, and how it applies to different situations in business and real estate.
- Understand and explain income elasticity and cross elasticity of demand.
- Understand how indifference curves represent consumer preferences, and how budget constraints affect consumer choice.
- Understand the difference between costs in the short-run versus the long-run.
- Understand the difference between fixed, variable, and marginal costs.
- Understand and explain perfect competition and the derivation of the supply curve.
- Understand that the height of the supply curve reflects marginal cost (MC) to the producer, just as the height of the demand curve reflects marginal benefit (MB) to the consumer.
- Understand that in a perfectly competitive market, the consumer equates marginal benefit and price.
- Understand that the demand curve can be used to measure, through a change in consumer surplus, approximately how consumers are affected by a change in price.
- Understand and identify the characteristics of a competitive market.
- Understand what causes competitive firms to enter and exit a market.
- Understand how to determine the market's short-run and long-run supply curves in a perfectly competitive market.

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- Understand the causes and effects of a monopoly market structure.
- Understand and identify some of the various public policies toward monopoly: competition law, regulation, public ownership, and doing nothing.
- Understand the implications of price discrimination in a monopolistic environment.
- Understand the consequences of government policies that impose a ceiling or a floor price on a market.
- Understand how a tax on a good affects market equilibrium price and quantity.
- Understand how the burden of a tax is divided between buyers and sellers.
- Understand and explain the meaning and causes of the deadweight loss of a tax.
- Understand the relationship among deadweight loss, tax revenue, and the size of a tax.
- Understand and recognize when private agreement can and cannot effectively solve problems associated with externalities.
- Understand why government policies may be implemented in situations where externalities are involved.

LESSON 1 – Introduction to Economics

1. Explain the concept of scarcity and how it necessitates allocative decisions.
2. Recognize that tradeoffs are a part of every decision.
3. Explain what is meant by opportunity cost.
4. Explain what decision-making at the margin means.
5. Recognize that incentives are an important part of the decision-making process.
6. Recognize that specialization and exchange usually benefit all market participants.
7. Begin to see how markets are an efficient way to organize production and allocate resources.
8. Understand the primary cause of inflation and explain why there is a trade-off between inflation and unemployment in the short-run.
9. Recognize how the scientific method is employed in the study of economics.
10. Explain how simple models help us learn about the world around us.
11. Explain the circular-flow model of the economy and the production possibilities frontier model.
12. Identify the differences between microeconomics and macroeconomics.
13. Explain the difference between normative and positive statements.
14. Identify how economics can be used in making policy.
15. Discuss why economists sometimes disagree over issues and policies.
16. Graph ordered pairs on a two-dimensional grid.
17. Plot a demand curve.
18. Calculate the slope of a line.
19. Explain two of the problems associated with drawing conclusions about cause and effect when using graphs.

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LESSON 2 – The Market Forces of Supply and Demand

1. Explain the concept of a competitive market.
2. Identify the factors that determine market demand.
3. Explain why the demand curve slopes downward to the right.
4. Show how the market demand curve is constructed by adding up the individual demand curves.
5. Identify the factors that determine market supply.
6. Explain why the supply curve slopes upward to the right.
7. Understand the types of changes that can shift the entire demand or supply curve.
8. Understand how and why demand and supply forces establish market prices and quantities.
9. Explain how prices and markets allocate society's scarce resources.

LESSON 3 – Elasticity and Its Application

1. Define and calculate the price elasticity of demand.
2. Describe what determines the price elasticity of demand.
3. Define and calculate the income elasticity of demand and the cross-price elasticity of demand.
4. Define and calculate the price elasticity of supply.
5. Describe what determines the price elasticity of supply.
6. Apply the elasticity concept to different situations.
7. Show how a straight-line demand curve that is elastic will, when extended, intersect the vertical axis, while a demand curve that is inelastic will intersect the horizontal axis.
8. Show how a straight-line supply curve that is elastic will, when extended, intersect the vertical axis, while a supply curve that is inelastic will intersect the horizontal axis.

LESSON 4 – The Theory of Consumer Choice

1. Discuss the construction and meaning of a budget constraint.
2. Describe the budget line and explain why the equilibrium for a utility-maximizing consumer will occur at a point on the budget line where it is tangent to an indifference curve.
3. Explain how an indifference curve can represent a consumer's preferences.
4. Describe how consumers maximize utility given their preferences and incomes.
5. Explain how a consumer responds to changes in income and changes in prices.
6. Separate the income and substitution effects from a price change.
7. Apply the theory of consumer choice to various applications.

LESSON 5 – The Costs of Production: Supply

1. Identify the items included in a firm's cost of production.
2. Explain the difference between economic profit and accounting profit.
3. Explain the relationship between the firm's production process and total costs.
4. Define total, variable, fixed, and marginal costs; also average total cost, average variable cost, and average fixed cost.
5. Explain the relationship between average total cost and marginal cost.
6. Identify the shape of a typical firm's cost curves.

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7. Explain the law of (eventually) diminishing returns, and explain why this law means that marginal cost must eventually rise.
8. Explain, using a diagram, why a firm's average cost curve is cut, at its minimum point, by its marginal cost curve.
9. Explain the relationship between short-run and long-run costs.
10. Define economies of scale, diseconomies of scale, and constant returns to scale.

LESSON 6 – Consumers, Producers, and the Efficiency of Markets

1. Explain how consumers' willingness to pay for a good determines the demand curve.
2. Measure and describe the concept of consumer surplus.
3. Explain how seller's costs of production determine the supply curve.
4. Measure and describe the concept of producer surplus.
5. Recognize that market equilibrium maximizes total surplus in a market.
6. Recognize that markets do not allocate resources efficiently in the presence of market failures such as market power or externalities.

LESSON 7 – Firms in Competitive Markets

1. Identify the characteristics of a competitive market.
2. Explain how competitive firms decide how much to produce.
3. Identify when competitive firms shut down temporarily.
4. Explain the difference in how sunk and fixed costs affect the production decisions of firms.
5. Discuss what causes competitive firms to enter and leave a market.
6. Explain how firms can earn zero economic profits and still remain in an industry in the long-run.
7. Examine how firm behaviour determines a market's short-run and long-run supply curves.

LESSON 8 – Monopoly

1. Identify the characteristics and sources of monopoly.
2. Analyze how a monopoly determines the quantity to produce and the price to charge to maximize profits.
3. Show how a monopolist's demand and marginal revenue are different from a perfect competitor's.
4. Evaluate the efficiency of monopoly.
5. Identify some of the various public policies toward monopoly: competition law, regulation, public ownership, and doing nothing.
6. Explain how and why a monopolist would charge different prices to different customers (price discriminate).
7. Provide examples of price discrimination.
8. Explain the difference in the effect on total surplus if the monopolist can or cannot price discriminate.

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LESSON 9 – Government Intervention

1. Examine the effects of government policies that place a ceiling on prices.
2. Examine the effects of government policies that place a floor under prices.
3. Consider how a tax on a good affects market equilibrium price and quantity.
4. Recognize the equivalence of taxes imposed on buyers and sellers.
5. Explain how the burden of a tax is divided between buyers and sellers.

LESSON 10 – Costs of Taxation

1. Discuss how taxes reduce consumer and producer surplus.
2. Explain the meaning and causes of the deadweight loss of a tax.
3. Explain why some taxes have larger deadweight losses than others.
4. Discuss the relationship among deadweight loss, tax revenue, and the size of a tax.
5. Discuss the relationship suggested by the Laffer curve.

LESSON 11 – Externalities

1. Describe the concepts of external costs and external benefits.
2. Explain why the presence of externalities can produce market failure.
3. Examine when private agreement can effectively solve problems associated with externalities.
4. Define and explain the Coase Theorem.
5. Examine when private agreement cannot adequately solve the problems associated with externalities.
6. Explain the various government policies aimed at solving the problem of externalities, including command-and-control policies and market-based policies.