

Unit 4: Firm Behavior and Market Structure
AP Microeconomics
20 Class Meetings
Rev. June 2019

Essential Questions

- How does a market set prices to maximize profit and minimize loss?

Enduring Understanding with Unit Goals

EU 1: A firm may sell its product in the following market structures: perfect competition, monopoly, monopolistic competition and oligopoly.

- Explain the differences between the 4 firms.
- Display the situation of specific markets and firms using correctly labeled graphs.

EU 2: Firms can be price makers or takers depending on the market structure they operate in.

- Explain why perfectly competitive firms are price takers.
- Explain why monopolistic firms are price makers
- Explain why oligopolistic firms must work together to set prices.
- Explain why monopolistically competitive firms use advertising to differentiate their product and set a product price.

EU 3: The goal of any firm is to maximize profit and minimize losses.

- Compare the long run profits of each market.
- Describe why each market structure can have a different goal for long run profit.

Standards

College Career and Civic Life - C3 Framework for Social Studies State Standards

- **D2.Eco.1.9-12.** Analyze how incentives influence choices that may result in policies with a range of costs and benefits for different groups.
- **D2.Eco.2.9-12.** Use marginal benefits and marginal costs to construct an argument for or against an approach or solution to an economic issue.
- **D3.4.9-12.** Refine claims and counterclaims attending to precision, significance, and knowledge conveyed through the claim while pointing out the strengths and limitations of both.

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- **D4.2.9-12.** Construct explanations using sound reasoning, correct sequence (linear or non-linear), examples, and details with significant and pertinent information and data, while acknowledging the strengths and weaknesses of the explanation given its purpose (e.g., cause and effect, chronological, procedural, technical)
- **D4.6.9-12.** Use disciplinary and interdisciplinary lenses to understand the characteristics and causes of local, regional, and global problems; instances of such problems in multiple contexts; and challenges and opportunities faced by those trying to address these problems over time and place.

Common Core State Standards

- **CCSS.ELA-LITERACY.RH.11-12.2** Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.
- **CCSS.ELA-LITERACY.RH.11-12.7** Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.
- **CCSS.ELA-LITERACY.WHST.11-12.1.A** Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence..
- **CCSS.ELA-LITERACY.WHST.11-12.1.D** Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
- **CCSS.ELA-LITERACY.WHST.11-12.1.E** Provide a concluding statement or section that follows from or supports the argument presented.
- **CCSS.ELA-LITERACY.WHST.11-12.2.B** Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.
- **CCSS.ELA-LITERACY.WHST.11-12.4** Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- **CCSS.ELA-LITERACY.WHST.11-12.9** Draw evidence from informational texts to support analysis, reflection, and research.
- **CCSS.ELA-LITERACY.WHST.11-12.10** Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

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MSMHS 21st Century Learning Expectations

- Competency 1.** Read and write effectively for a variety of purposes
Competency 2. Speak effectively with a variety of audiences in an accountable manner
Competency 3. Make decision and solve problems independently and collaboratively
Competency 5. Contribute to a positive learning environment with respect and responsibility

Unit Content Overview

- Perfect competition
- Monopoly
- Monopolistic competition
- Oligopoly
- Price taker
- Marginal revenue
- Profit maximization
- Shutdown point
- Short run vs. long run
- Entry/ exit
- Economic profit vs. economic loss
- Barrier to entry
- Legal, single-price, price-discriminating, & natural monopoly
- Price maker
- Rent seeking
- Price discrimination
- Differentiated products vs. standard products
- Advertising
- Duopoly
- Collusion
- Game theory
- Prisoner's dilemma
- Antitrust

- **Interdisciplinary Connections**
- Aquaculture and Resource Management- applying market theory to local aquatic resources

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- Aquatic Husbandry- understanding competitors and predicting their actions in market
- Algebra I- equations and graphing
- Algebra II- Interpreting data & graphs
- Topics in Mathematics: Business and Personal Finance- applying economic models to real life situations

Daily Learning Objectives with *TWPS Activities*

Students will be able to...

- Explain basics of the 4 different product markets to differentiate between them
 - *You are starting up a lemonade stand, what factors of production will you need? (at end use as exit slip; identify which of your factors represent fixed vs. variable costs)*
- Define, appropriately graph, and analyze a perfectly competitive product market in a given scenario
 - *Explain a real life example of a perfectly competitive market through specific examples of characteristics that make it perfectly competitive.*
 - *Create a scenario for the graph assigned.*
- Analyze impacts of the long and short run on perfect competition markets to determine production and potential shutdown points
 - *“It has been a long week for Ms. Frick. Between school, Ellie Mae, and her start up baking business she is running ragged. “What’s worse” she complained to Mrs. Nasser, “is at the end of every month I’m not even making money! I think I’m just going to take a break next month and shut down production!” Help Ms. Frick and explain to her when is the appropriate time for her to call it quits.*
- Interpret the impact of price floors and ceilings on a competitive market
 - *Interpret how price floors and ceilings could be used to help consumers. What about suppliers?*
- Utilize content knowledge to practice released AP exam questions
 - *Reflect on your AP progress; What do you find easy/challenging? How can you improve?*
- Define, appropriately graph, and analyze a monopolistic product market in scenarios of single price, price discriminating, and naturally monopolistic firms
 - *Explain and give a real life example of a monopolistic market.*

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- *Compare and contrast single price, price discrimination, and naturally monopolies. What is most likely to occur in real life? Why is this the most realistic?*
- Analyze impacts of the long and short run on monopoly markets.
 - *Review the impacts of the short run and long run on a perfectly competitive market. How do these impacts appear in a monopoly?*
- Explain how a monopoly and perfectly competitive market maximize profits
 - *Review the profit goals of monopoly and perfect competition, how do both firms individually achieve these goals.*
- Interpret the efficiency of profit maximizing monopolies and perfectly competitive markets and development of consumer/producer surplus and deadweight loss
 - *Are perfectly competitive and monopolistic markets efficient for anyone? Explain how the firm or consumer, ultimately benefits or is disadvantaged by the systems.*
- Describe and identify characteristics of monopolistic competition which determine how the market sets quantity and price in both the short and long run
 - *In what ways is monopolistic competition similar/different from monopoly and perfect competition? What is a real world example of a monopolistically competitive market?*
- Identify the significance of the point where $MR=0$ in monopoly and monopolistic competition in reference to elasticity and economies of scale
 - *What does MR represent? What is the literal meaning of the point where $MR=0$?*
- Describe an oligopoly and explain how goods are differentiated through methods including advertising
 - *Golden Ball (U.K. game show) clip- Halfway through what are the potential options of the players? What is the best option for both individually?*
- Use game theory to explain how output and price are determined in oligopoly
 - *Analyze different friendship conflicts and explain the best moves for each party to make using game theory matrices as your evidence.*
 - *Create a game theory matrix for a given scenario and explain the options and outcomes of each scenario. Identify Nash equilibrium and why firms need to know what it is.*
- Compare the government antitrust laws of the 3 main practices: resale price maintenance, predatory pricing, and tying arrangements
 - *Read "[Antitrust law never envisioned massive tech companies like Google](#)" and consider if antitrust laws are still effective in the modern world today. Be prepared to discuss*

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- Complete released AP exam Free Response Questions (FRQs) to reflect on successes and set goals for future practice.
 - *Released AP FRQ*

Instructional Strategies/Differentiated Instruction

- **HLP:** Accountable Talk
- **HLP:** Effective Feedback
- **HLP:** Writing to Learn (TWPS)
- Homework: reading and practice problems
- Lecture with notes
- Close reading with annotations
- Accountable Talk discussions
- Graphic organizers
- Self-assessments
- Strategic grouping
- Rephrasing information for students
- Student choice
- Learning through competitive games
- Personal connections
- Problem sets with practice AP test questions'
- Graphing practice
- Hands on simulations of concepts
 - Market structure: act out each market and try to sell your product.
 - Game Theory: Simulate UK's *Golden Balls* television show

Assessments

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FORMATIVE ASSESSMENTS:

- Daily Written Reflections/ Prompts
- Group Discussion
- Problem Sets: Theory of the Firm
- Graphing Assignment (perfect competition- side by side, monopoly, monopolistic competition, oligopoly (for each have long run, short run, profit, and loss))
- Identifying market structures in our lives: Activity
- Expanded Problem Set
- Unit Task: Released FRQ 2010 #1
 - MSMHS Rubric 3: Problem Solving
- Released FRQ 2016 #3
 - MSMHS Rubric 3: Problem Solving

SUMMATIVE ASSESSMENTS:

- Quizzes (EU 1,2,3)-
 - Quiz 1 (perfect competition & monopoly)
 - Quiz 2 (monopolistic competition & Oligopoly)
- Unit Test

Unit Task

Unit Task Name: Released FRQ 2010

Description: Students will use information from EU 1, 2, and 3 to show how a perfectly competitive market is impacted by changes to related goods by answering an AP FRQ in the correct format. Students will also have to recall information from Unit 2 about supply, demand, and elasticity to appropriately and accurately answer the questions.

Evaluation: MSMHS Rubric 3: Problem Solving

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Unit Resources

- ACDC Economics: Youtube
- Foundations of Economics, Bade and Parkin: Excerpts & practice problems from chapters 15,16 17, 17, 18
- Released AP Microeconomics tests
- Laptops