

# Unit 4: Imperfect Competition

Content Area:

Course(s):

Time Period:

**Year**

Length:

**180**

Status:

**Published**

## Summary

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In this unit, students will encounter the ways in which imperfectly competitive markets depart from the model of perfect competition introduced in Unit 3. Students will continue to build on their understanding of what it means for a market to be efficient or inefficient as they consider the welfare implications of imperfect markets. In the context of learning about oligopoly behavior, students will be introduced to the field of game theory as an approach to studying strategic decision making.

## Standards

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H/SS.MICE.II	The Nature and Functions of Product Markets
H/SS.MICE.II.D	Firm behavior and market structure
H/SS.MICE.II.D.4	Oligopoly
H/SS.MICE.II.D.4.b	Game theory and strategic behavior
H/SS.MICE.II.D.5	Monopolistic competition

## Priority Content Standards

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## Supplemental Content Standards

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ECON.4.9	Competition and Market Structure
ECON.4.9.2	Explain how changes in the level of competition in different markets can affect price and output levels.

## Interdisciplinary Connections (Standards)

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Please select relevant "Standards for Mathematical Practice (2023)", science and engineering practice standards "Grades 9-12/6-8 (2023)", ELA anchor statements, Social Studies practice standards. (3-6 total are suggested)

Planning and Carrying Out Investigations  
 Obtaining, Evaluating, and Communicating Information  
 Using Mathematics and Computational Thinking  
 Developing and Using Models  
 Constructing Explanations and Designing Solutions  
 Analyzing and Interpreting Data  
 Engaging in Argument from Evidence  
 Asking Questions and Defining Problems

## **Career Readiness, Life Literacies, and Key Skills PRACTICES**

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These practices should be taught and reinforced in all content areas with increasingly higher levels of complexity and expectation as a student advances through a program of study.

WRK.K-12.P.1	Act as a responsible and contributing community members and employee.
WRK.K-12.P.2	Attend to financial well-being.
WRK.K-12.P.3	Consider the environmental, social and economic impacts of decisions.
WRK.K-12.P.4	Demonstrate creativity and innovation.
WRK.K-12.P.5	Utilize critical thinking to make sense of problems and persevere in solving them.
WRK.K-12.P.6	Model integrity, ethical leadership and effective management.
WRK.K-12.P.7	Plan education and career paths aligned to personal goals.
WRK.K-12.P.8	Use technology to enhance productivity increase collaboration and communicate effectively.
WRK.K-12.P.9	Work productively in teams while using cultural/global competence.

## **Climate Change Standards**

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Select the Performance Expectations.

### [ClimateChange Education](#)

### **Stage I: Desired Results**

<b>STAGE I Desired Results</b>
<b><i>Learning Objective (Transfer)</i></b>
<p><i>Students will be able to use their learning to independently...</i></p> <ul style="list-style-type: none"> <li>• Define (using graphs where appropriate) the characteristics of imperfectly competitive markets and inefficiency.</li> <li>• Explain (using graphs where appropriate) equilibrium, firm decision making, consumer surplus, producer</li> </ul>

surplus, profit (loss), and dead-weight loss in imperfectly competitive markets and why prices in imperfectly competitive markets cannot be relied on to coordinate the actions of all possible market participants and can lead to inefficient outputs.

- Define (using tables as appropriate) key terms, strategies, and concepts relating to oligopolies and simple games.
- Explain (using tables as appropriate) strategies and equilibrium in simple games and the connections to theoretical behaviors in various oligopoly market and non-market settings.
- Calculate (using tables as appropriate) the incentive sufficient to alter a player's dominant strategy.

### ***Mastery***

#### *Enduring Understanding...*

- Imperfectly competitive markets include monopoly, oligopoly, and monopolistic competition in product markets and monopoly in factor markets.
- In imperfectly competitive output markets and assuming all else is constant, a firm must lower price to sell additional units.
- In a monopoly, equilibrium (profit-maximizing) quantity is determined by equating marginal revenue (MR) to marginal cost (MC). The price charged is greater than the marginal cost.
- A firm with market power can engage in price discrimination to increase its profits or capture additional consumer surplus under certain conditions.
- In a market with monopolistic competition, firms producing differentiated products may earn positive, negative, or zero economic profit in the short run. Firms typically use advertising as a means of differentiating their product. Free entry and exit drive profits to zero in the long run. The output level, however, is smaller than the output level needed to minimize average total costs, creating excess capacity. The price is greater than marginal cost, creating allocative inefficiency.

#### Essential Questions/ Big Ideas

- What drives producers' decision-making?
- How are imperfectly competitive markets inefficient?

### ***Acquisition***

#### *Essential Knowledge...*

- In a natural monopoly, long-run economies of scale for a single firm exist throughout the entire effective demand of its product.
- Firms in an oligopoly have an incentive to collude and form cartels.
- A game is a situation in which a number of individuals take actions, and the payoff for each individual depends directly on both the individual's own choice and the choices of others.

#### *Suggested skills...*

- Describing the similarities, differences, and limitations of economic concepts, principles, or models.
- Demonstrating understanding of a specific economic situation on an accurately labeled graph or visual.
- Interpreting a specific economic outcome using quantitative data or calculations.

- A strategy is a complete plan of actions for playing a game; the normal form model of a game shows the payoffs that result from each collection of strategies (one for each player).
- A Nash equilibrium is a condition describing the set of actions in which no player can increase his or her payoff by unilaterally taking another action, given the other players' actions.

## Stage II: Assessment Evidence

STAGE II Assessment Evidence	
Practices	Assessments
Unit Progress Check Game theory practices Group FRQs Monopoly case study Brand Wars	Unit 4 Test Student generated games Market structure project

## Modifications

Additional time on assessments

Guided notes

Audio/visual examples

Study guides

## Acceleration

Additional graphing practice

Supplemental readings

Additional free response practice

## Stage III: Learning Plan

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Unit 4: 1 week

- Lesson 1.1: Monopoly and Oligarchy case study
- Lesson 1.2: Price discrimination
- Lesson 1.3: Game theory and student created scenarios
- Lesson 2.1: Brand Wars activity
- Lesson 2.2: Market Structure Projects
- Lesson 2.3: Unit Test

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### Diversity, Equity, & Inclusion

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#### Diversity, Equity & Inclusion

Students will evaluate the impact that monopolistic systems have on individuals of varying incomes and identities.

### Specific Resources for Unit

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[jacob clifford youtube channel](#) & [website](#)

[Jason Welker youtube channel](#) (has useful videos aligned to the course and a ton of videos about graphs)

[Review Econ \(Jacob Reed\) youtube channel](#)

[T-Pock's economics course](#) & [T-Pock youtube channel](#)

[Wizeprep online course](#)\*: (similar to Khan academy but focused on the principles of microeconomics)

[MRU online course](#)\* (has not only review videos but teacher resources, review games, etc to use)

[Federal Reserve Education](#) (can filter the site based on unit/topic and it will provide lesson plans that you can download as a PDF or link to google classroom)

[AP micro Khan academy](#)\*

[AP practice exams.com](#) (useful platform with practice questions, links to helpful videos/youtube channels)

[The Economist youtube channel](#) (various videos pertaining to economics)

[Economics Explained](#) (various videos pertaining to economics)

[Think Econ](#) (great resource with many videos pertaining to the course)

[One minute economics](#) (short videos about different economic topics)

[UMASS Amherst economics](#) (videos from professors)

[Department of Economics Oxford U](#)

[Crash course economics](#) (same as the John Green network making these crash course videos)

[EconDal](#) (videos from an economics teacher about various topics)

[lessons for AP micro](#)

Free practice tests/questions:

[Varsity Tutors](#)

[https://highschooltestprep.com/ap/microeconomics/?utm\\_source=chatgpt.com](https://highschooltestprep.com/ap/microeconomics/?utm_source=chatgpt.com)

[https://knowt.com/exams/AP/AP%20Microeconomics/practice-test-room?utm\\_source=chatgpt.com](https://knowt.com/exams/AP/AP%20Microeconomics/practice-test-room?utm_source=chatgpt.com)

<https://www.crackap.com/ap/microeconomics/index.html>

Articles:

[financial times](#)

[Albert IO](#)

## **Technology Integration**

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Northern supports the integration of the [SAMR Model](#): a framework which extends learning through the use of technology. The installation of interactive boards, the purchase of softwares and subscriptions, and the investment in 1:1 laptops and various other instructional technologies are examples of Northern's commitment to enhancing students' learning and preparing the 21st century learner for college and careers.