

# Principles of Microeconomics

Week 1

Aug 20, 2024

# Plan for Today

- ▶ A little about myself
- ▶ A request for info about you
- ▶ Review of the syllabus
- ▶ Introduction to economics concepts

## A little about myself

- ▶ Minhee Lee
- ▶ Ph.D. candidate in Economics
- ▶ My research focuses on applied microeconomics (especially industrial organization)
- ▶ I grew up in Seoul, South Korea
- ▶ I love cats, but unfortunately, I don't own one. In my free time, I enjoy baking and crocheting.
- ▶ Please complete the "Introduce Yourself" section in the Week 1 Module.

# Review of Syllabus

- ▶ **Please read the syllabus!**
- ▶ Contact: lee.8954@osu.edu (preferred) or Carmen Message
- ▶ Announcements: Carmen message. Please check your inbox regularly.
- ▶ Office Hours
  - ▶ Tuesdays and Thursdays 9:30am-10:30am, 373 Arps Hall

## Required Materials

- ▶ Please read materials in Module “Digital Resources” to access for Ebook and Smartwork.
  - ▶ Textbook: Mateer, Dirk, and Lee Coppock, Principles of Microeconomics 4E, W.W. Norton & Co., 2023.
  - ▶ Weekly Smartwork Assignments (Student Set ID 831952)
- ▶ Slides will be uploaded to Carmen before class, allowing you to print or download the files ahead of time. Additional materials will also be made available on Carmen. Please remember to check the Carmen Modules for each week.

# Grading Policy

- ▶ Midterm (30%): October 8 (Tuesday), class time
- ▶ Final (30%): December 3 (Tuesday), class time
  - ▶ Send me an email ASAP if you are not available on the exam date!
  - ▶ All exams consist of multiple-choice questions. I will let you know the details when I finish making questions.
- ▶ Smartwork Assignment (30%): See Carmen Module for due dates. No late assignments will be accepted.

# Grading Policy

- ▶ Attendance (10%): Tophat quizzes (join through Carmen).
  - ▶ If you experience technical difficulties and are unable to submit a quiz, please inform me during or immediately after class. I will not modify or correct your quiz submission once the class has ended.
  - ▶ Each student is permitted a maximum of 2 excused absences per semester. To receive an excused absence, you must submit a request form ("Absence and Excuse Request" on Tophat) prior to the date of your absence. Late submissions may not be accepted.

# Leniency

- ▶ Smartwork Chapter 1 will be evaluated based on completion. Starting from Chapter 2 onwards, Smartwork assignments will be evaluated based on correctness.
- ▶ Attendance will not be checked during Week 1, but let's keep submitting Tophat quizzes to make sure everything works smoothly!
- ▶ I will not curve grades, but there may be Extra Credit opportunities (details TBD).



# Class Activity

- ▶ During lecture, there will be a few exercise questions. It is encouraged to collaborate with your group members to discuss and share ideas for solving these questions.
- ▶ Please let me know your group preferences by today. For instance, if you prefer sitting at the front of the classroom or have a specific friend you'd like in your group, please let me know.

# Introduction to Economics

- ▶ What is Economics? It is the study of the **behavior** of individuals and societies in the context of **scarcity**.
  - ▶ Scarcity: our wants and needs  $>$  resources
  - ▶ Behavior: making choices (optimal allocation of scarce resources)

Economics answers how individuals and societies make decisions about scarce resources.

- ▶ Microeconomics vs. Macroeconomics

# Foundations of Microeconomics

- ▶ 1. Trade-offs
- ▶ 2. Opportunity cost
- ▶ 3. Marginal thinking
- ▶ 4. Incentives
- ▶ 5. Trade creates value

# 1. Trade-offs

- ▶ People face trade-offs: scarce resources → every decision has cost and benefit.

## 2. Opportunity Cost

- ▶ **Opportunity cost:** the value of the next-best alternative that must be given up to obtain some item.
- ▶ Opportunity cost vs. Direct cost
- ▶ **Cost-benefit analysis:** the best decision is the one that maximizes the net benefits ( $= \text{benefits} - \text{costs}$ ) among the feasible alternatives.
- ▶ The relationship between optimization and opportunity cost?  
The best decision is also the one that minimizes the sum of direct cost and opportunity cost among the feasible alternatives.

## Example: Opportunity Cost of College

- Suppose there are two alternatives: college and work. What would be the opportunity cost of choosing to go to college?

|         | College | Work |
|---------|---------|------|
| Benefit |         |      |
| Cost    |         |      |

## Exercise Question: Opportunity Cost

- ▶ Your friend Charles asks you to drive him to the airport. He says that he will reimburse you for the cost of going to the airport. It is a two-hour round trip to the airport, and you will use \$15 in gas. If Charles pays for the cost of gas, has he paid your full cost of taking him to the airport? What other costs is Charles forgetting?

### 3. Marginal Thinking

- ▶ Rational people think **at the margin**
  - ▶ **Marginal benefit (=MB)**: additional benefit of one more unit of something
  - ▶ **Marginal cost (=MC)**: additional cost of one more unit of something
- ▶ Suppose that the choice is between doing more of less of something. Thinking at the margin means following the rule of optimization:
  - if  $MB > MC$ , do more.
  - if  $MB < MC$ , do less.
  - The optimal amount is achieved when  $MB = MC$ .



## Example: Marginal Thinking

- ▶ Alex spends his time snorkeling along the coastline and searching for underwater artifacts. The more time he spends at each site, the deeper he has to dive, and the fewer valuable items he finds. He has already invested in snorkeling gear.

| Benefits and Costs            |                            |                               |                         |                            |
|-------------------------------|----------------------------|-------------------------------|-------------------------|----------------------------|
| Days Spent<br>(days per week) | Total Benefit<br>(dollars) | Marginal Benefit<br>(dollars) | Total Cost<br>(dollars) | Marginal Cost<br>(dollars) |
| 1                             | \$1,000                    |                               | \$100                   |                            |
| 2                             | 1,800                      |                               | 250                     |                            |
| 3                             | 2,500                      |                               | 450                     |                            |
| 4                             | 3,000                      |                               | 700                     |                            |
| 5                             | 3,300                      |                               | 1,000                   |                            |
| 6                             | 3,500                      |                               | 1,350                   |                            |
| 7                             | 3,600                      |                               | 1,750                   |                            |

# Attendance

- ▶ Tophat (please join through Carmen)
  - ▶ Question: Class-wide announcements will be sent via \_\_\_\_\_.
- A Email
  - B Carmen message

Any Questions? Thank you and see you next time!