# ECON 103: Contemporary Microeconomic Principles

# George Mason University Korea

Spring 2024

**Instructor:** Edgar Castro Mendez, PhD

Email: ecastrom@gmu.edu

**Office Hours:** Tuesdays, 10:00 AM to 12:00 PM

Office: G764

# **Course Description**

ECON 103 Microeconomic Principles is a Mason Core Course and satisfies the Social and Behavioral Sciences requirement. The course explores economic issues using neoclassical microeconomic theory. The course examines how markets, as social coordination systems, efficiently allocate scarce resources using the price mechanism. We will study concepts such as supply, demand, and welfare economics. The course will also introduce students to economic methodology, including creating arguments, empirical verification, and policy decision-making.

### **Course Information**

• Course Number: ECON 103 K01

• Term: Spring 2024

• Schedule: Mondays and Wednesdays, 9:00 AM to 10:15 AM

• Location: Mason Korea, Room G301

• Prerequisites: None

• This course can be taken to fulfill Mason Core Course and satisfy the Social and Behavioral Sciences requirement.

# **Course Objectives**

- To equip students with foundational knowledge and skills for understanding and applying microeconomic principles in analyzing various economic and social issues.
- To enhance students' skills in formulating coherent arguments and critically evaluating diverse perspectives on economic phenomena, especially in discussions of economic policy.

# **Mason Core Learning Outcomes**

- Students are able to interpret quantitative information (i.e., formulas, graphs, tables, models, and schematics) and draw inferences from them.
- Given a quantitative problem, students are able to formulate the problem quantitatively and use appropriate arithmetical, algebraic, and/or statistical methods to solve the problem
- Students are able to evaluate logical arguments using quantitative reasoning.
- Students are able to communicate and present quantitative results effectively.

# **Specific Learning Outcomes**

By the end of this course, students will grasp key microeconomic principles and concepts including opportunity cost, scarcity, comparative advantage, market dynamics, and supply and demand laws. They will learn about consumer and firm behaviors, focusing on utility maximization and profit maximization. Key learning outcomes encompass understanding:

- Scarcity, specialization, opportunity cost in economic decision-making.
- Supply and demand determinants; effects on equilibrium price and output.
- Law of Diminishing Marginal Utility and utility maximization.
- Supply and demand elasticities, price elasticity, and its impact on total revenue.
- Production function, Law of Diminishing Marginal Productivity, and production costs.
- Characteristics of four market structures; marginal analysis for profit maximization.
- Profit maximization in factor markets under varying competition levels.
- Governmental responses to market failures like monopolies and externalities.
- Benefits of free trade and comparative advantage.
- Impact of societal, environmental, and economic changes on industries and choices.

### **Contents**

The course is structured into four modules. The first two modules, covering perfect competition and market fundamentals, comprise over half the course duration. The latter two, focusing on market failures and economic regulation, introduce advanced and contemporary concepts.

- 1. **Perfect competition market:** This module explores agents' decision-making and market operations in perfect competition. It includes an analysis of markets in partial equilibrium and comparative statics.
- 2. **Individual agents' behaviors:** This covers optimal choices for producing and consuming firms, encompassing firm costs, profits, consumer preferences, and optimization.
- 3. **Topics on public economics:** This section looks at the effects of common government interventions such as taxation and other potential interventions designed to address market failures.
- 4. **Imperfect competition and market failures:** This segment presents non-competitive market structures, including monopoly, oligopoly, and monopolistic competition. It examines prevalent market failures, such as externalities and public goods, and introduces related concepts, institutions, and issues surrounding collective action.

# **Required Readings**

- Mankiw, N. G. (2016). Principles of Microeconomics (8th ed.). Cengage Learning.
- Lectures and other course materials will be available on Blackboard.

#### **Course Policies**

# Class quizzes

There will be a minimum of six unannounced quizzes throughout the course, which will contribute to the final grade and also evaluate the students' overall timely understanding of the course material. Quizzes will be graded in binary format: Pass or Fail. The final quiz grade will be calculated based on the percentage of quizzes passed relative to the total number of quizzes administered.

#### **Exams**

The course includes a midterm and a final exam. The midterm will encompass topics from the first two sections of the course. The final exam is comprehensive. If the final exam grade is higher, it can replace the midterm grade. Exam absences must be justified by a **medical excuse only**.

#### **Problem sets**

At least two problem sets will be assigned, contributing to the final grade and serving as preparation for each exam. All answers to the problem set **must be handwritten** and delivered before the exam date. The final grade for the problem sets will be calculated as their average grade.

#### Attendance

Attendance is strongly encouraged, and students are expected to attend all classes and actively participate in discussions. If you anticipate being absent, please notify me via email in advance. Please note that if a surprise quiz is administered during your absence, it cannot be made up later.

### **Electronic device policy**

A laptop will be required for one or two sessions throughout the semester in order to participate in class experiments. However, electronic devices are prohibited during all other class sessions.

### **Grading Policy**

Midterm Exam: 25%
Problem Sets: 25%
Class Quizzes: 20%
Final Exam: 30%

#### **Important Dates**

• Midterm exam: April 1

• Final Exam: June 12 (We follow Mason Korea final exam schedule)

• Spring recess (no classes): Mon Apr 8-Tue Apr 9

• Make up day 1: Tue Apr 30

• Children's day (no classes): Mon May 6

• Make up day 2: Thu May 16

#### Course schedule

This class schedule is provisional and subject to change during the semester. I will inform you of any adjustments in advance. Students are responsible for completing the assigned readings and their content may be included in the class quizzes.

• Week 1: Introduction

- Syllabus review

Market experiment

- Reading: Ch. 1
- Week 2: Intro to economic thinking
  - Reading: Ch. 2
- Week 3: Trade
  - Ricardian model of trade
  - Comparative advantage
  - Reading: Ch. 3
- Week 4: Market forces
  - Supply and demand
  - Reading: Ch. 4
- Week 5: Elasticity
  - Elasticity and its applications
  - Reading: Ch. 5 and 6
- Week 6: Welfare
  - Consumers, Producers, and the Efficiency of Markets.
  - Reading: Ch. 7
- Week 7: Taxation
  - Midterm April 1
  - Costs of taxation
  - Reading: Ch. 8
- Week 8: Spring Recess (no classes)
- Week 9: Taxation
  - Midterm April 1
  - Costs of taxation
  - Effect of Tariffs on International Trade
  - Reading: Ch. 8 and 9
- Week 10: Externalities
  - Reading: Ch. 10
- Week 11: Tragedy of the commons
  - Public Goods and Common resources
  - we meet on Tuesday (make up day 1)
  - Reading: Ch. 11
- Week 12: Public goods
  - Children's day (No classes)
  - Reading: Ch11
- Week 13: Imperfect competition
  - Monopoly
  - we meet on Thursday (make up day 2)
  - Reading: Ch. 15
- Week 14: Imperfect competition
  - Oligopoly
  - Reading: Ch. 17
- Week 15: Price controls
  - Reading: Coyne, C. and Coyne, R. (2015). Flaws and ceilings: price controls and the damage they cause. Institute of Economic Affairs, London, UK

# **Confidentiality Statement**

All student records, including grades, are protected under privacy regulations. Communications between students and instructors must occur exclusively through the university's official email system to ensure the confidentiality and security of such exchanges.

# **Honor Code Statement**

Students are expected to adhere to the George Mason University Honor Code. All work submitted in this course must be your own. Cheating, plagiarism, or any form of academic dishonesty will not be tolerated and will result in appropriate sanctions as per university policies. More information about the Honor Code, including definitions of cheating, lying, and plagiarism, can be found on the Committee of Academic Integrity's website at

https://masonkorea.gmu.edu/resources-and-services/cai/overview.

# **Title IX Statement**

Notice of mandatory reporting of sexual assault, interpersonal violence, and stalking: As a faculty member, I am designated as a "Responsible Employee," and must report all disclosures of sexual assault, interpersonal violence, and stalking to Mason Korea's Deputy Title IX Coordinator pursuant to University Policy 1202 and 1412. If you would like to speak confidentially with the Mason Korea counselor, please see https://masonkorea.gmu.edu/resources-and-services/counseling-and-wellness for more information. For more information about what Title IX is, please see https://masonkorea.gmu.edu/resources-and-services/title-ix.