

CORE-GP 1018 Microeconomics Spring 2025

## **Instructor Information**

- Professors:
  - Professor Sewin Chan, <a href="mailto:sewin.chan@nyu.edu">sewin.chan@nyu.edu</a>
  - Professor Rebecca Kellogg, <u>rh1203@nyu.edu</u>
- Teaching Assistants:
  - Matt Looney, <u>mjl443@nyu.edu</u> (Head TA)
  - o Shashank Sreedharan, shashank.sreedharan@nyu.edu
- Course Administrator:
  - Harry Boadu, <u>hb1024@nyu.edu</u>

## **Lecture Schedule**

- Section 1: Monday 2:00 3:40pm, Sewin Chan
- Section 2: Monday 4:55 6:35pm, Rebecca Kellogg

## **Recitation Schedule**

Each week of the course runs on a **Monday to Thursday** schedule. Recitations begin on **Tuesday 28 January.** 

- Section 3: Tuesday, 5:30 6:30pm, online, Matt Looney
- Section 4: Thursday, 8:00 9:00pm, online, Shashank Sreedharan

## **Tutoring Schedule**

- The tutoring schedule is posted on the course website.
- All tutoring is online and begins after the first lecture.

# **Course Description and Objectives**

Students completing the course should gain the following knowledge and skills:

- 1. The ability to articulate tradeoffs in terms of opportunity cost, for individuals and for organizations.
- 2. An understanding of comparative advantage and the gains from trade.
- 3. The ability to employ marginal analysis in all types of decision making.
- 4. An understanding of how economic agents (consumers, organizations, workers, etc.) behave and respond to incentives, and how those decisions collectively affect aggregate outcomes.
- 5. An understanding of how markets work, and the ability to analyze the impact of economic events on market and organizational outcomes.
- 6. The ability to recognize the strengths and weaknesses of markets as a way to organize economic activity, and when market failures are likely to arise. An understanding of how public policy can improve market outcomes.
- 7. The ability to analyze and compare the efficiency and equity implications of alternative policy interventions.

The exams and assignments assess all of the above learning objectives.

# Math Review

If you are at all unsure of your basic math, algebra and graphing skills, you should either work through this <u>set of materials</u> before the start of the semester: <u>https://wagner.nyu.edu/portal/students/academics/advisement/quantitative</u>

or attend the Wagner Math Review course (NONCR-GP 0906):

• 01/29/2025 - 03/05/2025 Thu 6.45 PM - 8.25 PM

You will need a clear and intuitive grasp of these math and graphing concepts to successfully complete this course. These concepts will not be reviewed in class.

# Books

The required book for the course is McGraw-Hill's **Microeconomics** (**3rd edition**) by Dean Karlan and Jonathan Morduch. This is available from the NYU Book Store and in Course Reserves at Bobst. Additional readings will be available on the course website.

# **Course Website on NYU Brightspace**

Announcements and course materials are posted on the Brightspace course site. The site can be accessed from the Academics tab in NYU Home. Some announcements will be distributed via e-mail, thus, it is important that you actively use your NYU e-mail account or have appropriate forwarding set up. Materials on the course site can be accessed by selecting Content from the row of links at the top of the course homepage, and then using the tabs in the left navigation bar. Materials are organized by class; within each class's tab, the content is sorted into pre- and post-class activities.

# **Course Requirements**

## Readings and Review Question/Problems (pre-class)

Readings should be done prior to the class for which they are listed. The assigned review questions and problems from the textbook should be completed as part of doing the textbook reading. You do not need to hand these in, but we will assume you have done them. The answers to these problems are posted in the pre-class activities section of each class's tab, however, do **not** consult answers before trying the problems on your own.

#### Pre-recorded lecture content (pre-class)

You should watch the pre-recorded portion of each lecture (about 15 minutes). The synchronous lecture assumes you have watched the video and attempted any problems/questions it poses; **that will be the starting point of class each week.** 

#### News Analysis and Discussion (pre-class):

For many of the classes, we assign a specific reading or podcast for discussion along with a set of discussion questions. You should apply economic reasoning to the issues raised in these readings and **jot down your answers to the associated questions** before coming to class. Your answers to these questions will form the basis of in-class discussion.

#### Class Participation, 5% of grade:

Lecture attendance is expected and you should email your professor in advance if you will be absent. More than one unexcused absence during the semester will impact your grade.

## Quizzes (pre-class), 5% of grade:

Brief **online multiple choice quizzes** on the reading material and pre-class video will be administered through the course site, and will close at 11:59pm the night before lecture. You should plan to log in and take the quiz well before the site closes; you cannot be excused from taking a quiz due to last minute connectivity problems. Pre-class quizzes provide a rapid assessment of your grasp of pre-lecture material, and will be graded pass/fail. You are permitted to miss/drop one quiz without penalty.

#### Assignments (post-class), 10% of grade:

The eleven written assignments posted on the course site should be completed after the lecture covering that material. They must be uploaded to Gradescope (see specific instructions on the course site) by 11:59pm the night before your next lecture. These assignments are intended to provide timely feedback on your understanding of key concepts post-lecture and before exams. They are graded pass or fail to promote learning. In Gradescope, your assignment score is represented as follows: 4 = check plus, 3 = check, 2 = check minus, and 1 = incomplete/late. These numeric scores are provided as feedback only. In calculating course grades, scores of 4, 3, and 2 (check plus/check/check minus) are entered as "pass." Late or incomplete assignments do not receive credit. You are permitted to miss/drop one assignment without penalty. Assignments are reviewed in the weekly recitations.

#### Practice problems (post-class):

The class tabs often include practice problems that you can complete after class for extra practice. Answers are posted, as well as videos with a walk-though on solving the problems. You should complete the practice problem on your own before looking at the answers.

#### Additional study materials (post-class):

The recitation handouts (see below) include additional practice problems. Additional videos relating to the lecture topics are available for some classes in the post-class section of each class's tab.

Exams, 80% of grade:

- 35% of grade: 2 hour midterm exam. No make-ups. Note extended time.
- 45% of grade: 2 hour cumulative final exam. No make-ups. Note extended time.
- If you have a conflict with the exam dates and times, you should not take this course.

## **Recitations and Tutoring**

#### Recitations:

**Recitations will not cover new material.** They review material from the previous class primarily by going over problems that are posted in the post-class activities section of each class tab. Assignments will be reviewed in recitation and **not** during lecture. You will need to master the content of these recitations to successfully complete the course.

#### Tutoring hours:

We have scheduled tutoring office hours to provide **one-on-one tutoring**. This tutoring is not a substitute for the recitations, but an additional resource for questions best addressed one-on-one.

# **Online Recitations and Tutoring**

Links to online recitations and tutoring are in the Zoom link. See <u>NYU's Getting Started with</u> <u>Zoom</u> for basic Zoom information.

Students have access to 24/7 support from NYU's IT services. Explore the <u>NYU servicelink</u> knowledgebase for troubleshooting and student guides for all NYU-supported tools (like NYU Brightspace, Zoom, etc). Contact <u>askIT@nyu.edu</u> or 1-212-998-3333 for 24/7 technology assistance, or <u>Zoom's 24/7 technical support</u> and resources.

# **Statement of Academic Integrity**

Academic integrity is a vital component of Wagner and NYU. All students enrolled in this class are required to read and abide by <u>Wagner's Academic Code</u>. All Wagner students have already read and signed the <u>Wagner Academic Oath</u>. Plagiarism of any form will not be tolerated, and students in this class are expected to report violations to their professor. If you are unsure about what is expected of you and how to abide by the academic code, you should consult with your professor.

For this particular course, there are some specific behaviors required to meet our standards of academic integrity:

#### Assignments:

While we strongly encourage all students to work in groups, the final write-up of assignments must be done individually with no sharing of written answers.

#### Exams:

All exams must be the sole work of the individual student. Students may not consult or share information with anyone (other than their professor) during the exams.

#### ChatGPT and other generative AI tools:

Using ChatGPT and related tools will reduce what you learn in this course. Consequently, we discourage students from using AI assistance on assignments and prohibit students from using it on exams.

Violations of these standards may result in all participating students failing the course and being remanded to the discipline committee for further action.

## Henry and Lucy Moses Center for Student Accessibility

Students who are requesting academic accommodations should reach out to the Moses Center as early as possible in the semester for assistance. Please visit the <u>Moses Center for Student</u> <u>Accessibility website</u> and click on Academic Accommodations.

## NYU's Calendar Policy on Religious Holidays

<u>NYU's Calendar Policy on Religious Holidays</u> states that members of any religious group may, without penalty, absent themselves from classes when required in compliance with their religious obligations. Please notify your professor in advance of religious holidays that might coincide with exams to schedule mutually acceptable alternatives.

## **Detailed Course Outline**

See the course website for details of:

- Reading and review questions/problems (complete before class)
- Pre-class video (complete before class)
- News analysis/discussion questions and quizzes (complete before class)
- Practice problems and post-class videos (optional, post class)

Class 1: Introduction to microeconomics and why it matters for public service

An introduction to microeconomics and its core principles; main methods and tools of economics (models, variables, graphs, equations). The production possibility frontier as an illustration of scarcity, choice and opportunity cost; comparative advantage and gains from trade.

Lecture: 27 January

Recitations: 28 - 30 January

Assignment (complete after class, due by 11:59pm the night before next class):

• Class 1 Assignment

### Class 2: Demand and supply basics: price determination

Fundamental model of competitive markets, demand and supply curves; market determination of price and market equilibrium.

Lecture:

3 February

- Class 1 Assignment due by 11:59pm the night before
- Class 2 Pre-class quiz due by 11:59pm the night before

Recitations:

4 - 6 February

Assignment (complete after class, due by 11:59pm the night before next class):

Class 2 Assignment

#### Class 3: Elasticity, consumer and producer surplus, and price interventions

The shape of demand and supply curves; the importance of elasticity and its measurement. Measuring gains from trade using surplus. Price ceilings and floors.

# Lecture:

10 February

- Class 2 Assignment due by 11:59pm the night before
- Class 3 Pre-class quiz due by 11:59pm the night before

## Recitations:

11 - 13 February

Assignment (complete after class, due by 11:59pm the night before next class):

Class 3 Assignment

#### Class 4: Policy interventions: taxes and subsidies

What happens when policy interventions interfere with supply or demand? Tax incidence, deadweight loss and efficiency.

Lecture:

\*Tuesday 18 February

- Class 3 Assignment due by 11:59pm the night before
- Class 4 Pre-class quiz due by 11:59pm the night before

\*Monday classes run on Tuesday 18 February (Legislative Monday)

#### **Recitations:**

20 February

\*If you are registered for the Tuesday recitation, please attend the Thursday recitation this week.

Assignment (complete after class, due by 11:59pm the night before next class):

• Class 4 Assignment

# Class 5: Production: framing decisions, costs, profits, competitive markets and supply

Decisions made by organizations that result in the supply of goods and services; implicit costs, opportunity costs and economic profit; production functions, cost functions; short-run versus long-run; profit maximization and output decisions of competitive firms.

#### Lecture:

24 February

- Class 3 Assignment due by 11:59pm the night before
- Class 4 Pre-class quiz due by 11:59pm the night before

Recitations: 25 - 27 February Assignment (complete after class, due by 11:59pm the night before next class):

Class 5 Assignment

### Class 6: Production (continued); International trade and tariffs

Market dynamics in the long run. International trade and tariffs. Review of economic applications.

Lecture:

3 March

- Class 5 Assignment due by 11:59pm the night before
- Class 6 Pre-class quiz due by 11:59pm the night before

Recitations: 4 - 6 March

## Class 7: Midterm examination (covers weeks 1-6)

Exam:

10 March

Lecture times will be extended by 20 minutes to accommodate the two hour exam. Details to follow.

No recitations 11-13 March.

### Class 8: Consumer choice and decision-making

Rational decision-making for price-taking consumers; budget constraints, utility; income and substitution effects. Behavioral economics and choice architecture.

Lecture:

17 March

• Class 8 Pre-class quiz due by 11:59pm the night before

Recitations: 18 - 20 March

Assignment (complete after class, due by 11:59pm the night before next class):

Class 8 Assignment

Spring Break

#### Class 9: Labor markets

Labor market demand and supply; marginal productivity; human capital theory; compensating differentials; labor market discrimination.

Lecture:

31 March

- Class 8 Assignment due by 11:59pm the night before
- Class 9 Pre-class quiz due by 11:59pm the night before

Recitations:

1 - 3 April

Assignment (complete after class, due by 11:59pm the night before next class):

• Class 9 Assignment

#### Class 10: Imperfect competition

Long run costs and returns to scale. Overview of market structures; monopoly; price discrimination; oligopoly.

Lecture:

7 April

- Class 9 Assignment due by 11:59pm the night before
- Class 10 Pre-class quiz due by 11:59pm the night before

Recitations:

#### 8 - 10 November

Assignment (complete after class, due by 11:59pm the night before next class):

Class 10 Assignment

#### Class 11: Game Theory and Strategic Behavior

Decision-making with interdependency, game theory, payoff matrices, decision trees. Auctions.

Lecture:

14 April

- Class 10 Assignment due by 11:59pm the night before
- Class 11 Pre-class quiz due by 11:59pm the night before

Recitations:

15 - 17 April

Assignment (complete after class, due by 11:59pm the night before next class):

• Class 11 Assignment

## Class 12: Asymmetric information and incentives

Asymmetric information; moral hazard and adverse selection in insurance markets and the workplace; principal-agent problems and incentives.

#### Lecture:

21 April

- Class 11 Assignment due by 11:59pm the night before
- Class 12 Pre-class quiz due by 11:59pm the night before

# Recitations:

22 - 24 April

Assignment (complete after class, due by 11:59pm the night before next class):

• Class 12 Assignment

### Class 13: Externalities

Positive and negative externalities; remedies involving market incentives; role of property rights.

Lecture:

28 April

- Class 12 Assignment due by 11:59pm the night before
- Class 13 Pre-class quiz due by 11:59pm the night before

Recitations: 29 April – 1 May

Assignment (complete after class, due by 11:59pm the night before next class):

Class 13 Assignment

#### Class 14: Public goods; Review of economic applications

Public goods and common resources. Review of market failures and the role of public policy. Review of key lessons from the course.

Lecture:

5 May

- Class 13 Assignment due by 11:59pm the night before
- Class 14 Pre-class quiz due by 11:59pm the night before

#### Recitations:

#### 6 May

\*If you are registered for the Thursday recitation, please attend the Tuesday recitation this week.

### Class 15: Final examination (covers weeks 1-14)

Exam: 12 May Lecture times will be extended by 20 minutes to accommodate the two hour exam. Details to follow.

## **Grading Criteria**

Grades will be assigned according to the following criteria:

A Excellent: Exceptional work for a graduate student. Work at this level is unusually thorough, well-reasoned, creative, methodologically sophisticated, and well written. Work is of exceptional, professional quality.

A- Very Good: Very strong work for a graduate student. Work at this level shows signs of creativity, is thorough and well-reasoned, indicates strong understanding of appropriate methodological or analytical approaches, and meets professional standards.

B+ Good: Sound work for a graduate student; well-reasoned and thorough, methodologically sound. This is the graduate student grade that indicates the student has fully accomplished the basic objectives of the course.

B Adequate: Competent work for a graduate student even though some weaknesses are evident. Demonstrates competency in the key course objectives but shows some indication that understanding of some important issues is less than complete. Methodological or analytical approaches used are adequate but student has not been thorough or has shown other weaknesses or limitations.

B- Borderline: Weak work for a graduate student; meets the minimal expectations for a graduate student in the course. Understanding of salient issues is somewhat incomplete. Methodological or analytical work performed in the course is minimally adequate. Overall performance, if consistent in graduate courses, would not suffice to sustain graduate status in "good standing."

C/-/+ Deficient: Inadequate work for a graduate student; does not meet the minimal expectations for a graduate student in the course. Work is inadequately developed or flawed by numerous errors and misunderstanding of important issues. Methodological or analytical work performed is weak and fails to demonstrate knowledge or technical competence expected of graduate students.

F Fail: Work fails to meet even minimal expectations for course credit for a graduate student. Performance has been consistently weak in methodology and understanding, with serious limits in many areas. Weaknesses or limits are pervasive.