New York University
Robert F. Wagner Graduate School of Public Service
CORE-GP 1018 Microeconomics
Fall 2017

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Office hours: Puck 3041, Thursdays 2 – 3pm

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Office hours: Puck 3045, Thursdays 1 – 2:30pm

Teaching Assistants:
Matthew Looney, mj1443@nyu.edu (head TA)
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Xiaodi Li, xl1060@nyu.edu
Colin Murphy, csm488@nyu.edu

Course Administrator:
Catherine Falzone, 212.992.8701, catherine.falzone@nyu.edu

Lectures:
Section 01: Tuesday 9.30am – 12.15pm, Silver 414, Kathy O’Regan
Section 02: Tuesday 6.45pm – 9.30pm, Silver 520, Kathy O’Regan
Section 03: Wednesday 2.00pm – 4.45pm, 12WV L120, Sewin Chan
Section 04: Wednesday 6.45pm – 9.30pm, Silver 208, Sewin Chan
Section 05: Thursday 9.30am – 12.15pm, 12 WV L120, Erica Dixon

Recitations:
Section 07: Wednesday 8.45pm - 9.45pm, Silver 414, Colin Murphy
Section 08: Thursday 8.45pm - 9.45pm, Silver 414, Becky Kellogg
Section 09: Friday 12.30pm - 1.30pm, 12WV L120, Matt Looney
Section 10: Friday 3.00pm - 4.00pm, 12WV L120, Matt Looney
Section 06: Monday 5.00pm - 6.00pm, Silver 414, Pisei Chea
Section 11: Monday 5.30pm - 6.30pm, GCASL 388, Xiaodi Li

Recitations begin on Wednesday September 6th and run on a Wednesday through Monday schedule. Tutoring sessions begin on Monday September 11th.
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.

MATH REVIEW

If you are at all unsure of your basic math, algebra and graphing skills, you should either work through this set of materials before the start of the semester:
http://wagner.nyu.edu/students/services/math_review
or, attend the Wagner Math Review course (NONCR-GP 0906). The next sections are:
(002) Wednesdays 4:55-6:35pm for 5 weeks, Sep.13 – Oct. 11; and
(003) Fridays 12:00-1:40pm for 5 weeks, Sep. 15 - Oct. 13.

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

2. Additional readings will be available on the course website.

COURSE WEBSITE ON NYU CLASSES

The site can be accessed from the Academics tab in NYU Home or directly here:
http://newclasses.nyu.edu . If you have not activated your account or have forgotten your password, go to http://start.nyu.edu . All announcements and course related documents will be posted here. Some class announcements will also be distributed via e-mail. Thus, it is important that you actively use your NYU e-mail account, or have appropriate forwarding set up. All the folders referenced below can be found by clicking on RESOURCES in the left navigation bar.
COURSE REQUIREMENTS

Readings (pre-class): Readings should be done prior to the class for which they are listed.

Review Questions and Problems (pre-class): The assigned problems from the textbook should be completed before coming to class. These are not graded but we will assume you have done them. The answers to these problems are posted in the END-OF-CHAPTER SOLUTIONS folder, however, do not consult these before trying the problems on your own.

News Analysis and Discussion (pre-class): These materials are posted in the READINGS folder. For approximately half of the classes, your instructor will assign specific items for discussion along with a set of discussion questions. You should apply economic reasoning to the issues raised in these readings or podcasts 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. Your participation in the class discussion will affect your grade at the margin. [NB: You can obtain unlimited access to New York Times articles by activating an Academic Pass using your NYU email address here: http://nytimes.com/passes ]

Assignments (post-class) 10% of grade:
Eleven written assignments are posted in the ASSIGNMENTS folder. These apply concepts from the course to specific problems, and they form the basis for the weekly recitations. Please write legibly and attached to printed copies of the assignment or type your answers into WORD versions. Completed assignments should be handed to the professor at the start of the next class, or handed to Catherine Falzone before then. Late assignments will not receive any credit. Do not put your assignment in anyone’s mailbox, as it may not be picked up in time to receive credit. These assignments are intended to provide timely feedback on your progress and to teach concepts. They are graded pass (check plus/check/check minus) or fail to promote learning.

Post-class practice problems and videos: Your lecture handout will often include practice problems that should be completed after class. Answers are posted in the ANSWERS TO LECTURE PRACTICE PROBLEMS folder. In some weeks, there are videos that provide a step-by-step solution to these problems. You should complete the practice problem on your own before looking at the answers or watching the video.

Additional study materials (optional): The recitation handouts (see below) also include additional practice problems.

Exams:
40% of grade: In-class midterm exam. No make-ups.
50% of grade: Cumulative final exam, covering material from the entire course. No make-ups. If you have a conflict with the scheduled exam dates, you should not take this course.
RECI TATIONS AND TUTORING

Recitations:
Recitation sections in any given cycle will cover the same content. While you have registered for a specific section, you may attend an alternate section on a space-available basis.

Recitations will not cover new material. They review material from the previous class primarily by going over problems. These are posted in the RECITATION HANDOUTS folder. Assignments will be reviewed in recitation and not during class. While attendance is not mandatory, you will need to master the content of these recitations to successfully complete the course. The average student will need to attend, and we strongly encourage you to do so at least until the midterm exam.

Tutoring hours:
We have scheduled tutoring office hours to provide one-on-one tutoring. Please see the course website for the schedule and locations. This tutoring is not a substitute for the recitations, but an additional resource for questions best addressed one-on-one.

STATEMENT OF ACADEMIC INTEGRITY

As members of the NYU Wagner community, we are all expected to adhere to high standards of intellectual and academic integrity. Wagner’s academic code can be found here: https://wagner.nyu.edu/portal/students/policies/code

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.

Violations of these standards will automatically result in all participating students failing the course and being remanded to the discipline committee for further action.
### COURSE SCHEDULE

<table>
<thead>
<tr>
<th>Dates</th>
<th>Lecture</th>
<th>Recitation</th>
<th>Prepare Before Class</th>
<th>Complete After Class</th>
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<td>Readings, Problems</td>
<td>News Analysis</td>
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<td>Post-class practice</td>
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<td>Assignment due next class</td>
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<tr>
<td>1 5-7 Sep</td>
<td>6-11 Sep</td>
<td>Introduction</td>
<td>X</td>
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<td>2 12-14 Sep</td>
<td>13-18 Sep</td>
<td>Demand, supply</td>
<td>X</td>
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<td>3 19-21 Sep</td>
<td>20-25 Sep</td>
<td>Elasticity, surplus, price controls</td>
<td>X</td>
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<td>4 26-28 Sep</td>
<td>27 Sep-2 Oct</td>
<td>Taxes</td>
<td>X</td>
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<td>5 3-5 Oct</td>
<td>4-9 Oct</td>
<td>Production</td>
<td>X</td>
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<td>6 10-12 Oct</td>
<td>11-16 Oct</td>
<td>International trade, tariffs</td>
<td>X</td>
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<td>7 17-19 Oct</td>
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<td>MIDTERM EXAM - in class</td>
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<td>8 24-26 Oct</td>
<td>25-30 Oct</td>
<td>Consumer choice</td>
<td>X</td>
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<td>9 31 Oct- 2 Nov</td>
<td>1-6 Nov</td>
<td>Labor markets</td>
<td>X</td>
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<td>10 7-9 Nov</td>
<td>8-13 Nov</td>
<td>Imperfect competition</td>
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<td>11 14-16 Nov</td>
<td>15-20 Nov</td>
<td>Game theory</td>
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<td>12 28-30 Nov</td>
<td>29 Nov-4 Dec</td>
<td>Asymmetric information</td>
<td>X</td>
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<tr>
<td>13 5-7 Dec</td>
<td>6-11 Dec</td>
<td>Externalities</td>
<td>X</td>
<td>X</td>
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<td>14 12-14 Dec*</td>
<td>13-18 Dec</td>
<td>Public goods, review</td>
<td>X</td>
<td>X</td>
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<tr>
<td>15 19-20 Dec**</td>
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<td>FINAL EXAM - in class times**</td>
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* The Tuesday lectures (01 and 02) are made up in week 14. Monday classes run on 12 Dec.
**The Thursday section (05) takes the final exam on Tues-Weds.
Unless otherwise noted, all readings, review questions and problems are from Karlan & Morduch 2nd edition.

**Week 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.

<table>
<thead>
<tr>
<th>Reading</th>
<th>Introduction</th>
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<tbody>
<tr>
<td>Ch 1</td>
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<td>Appendix A</td>
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<tr>
<th>Review Questions</th>
<th>Ch 2: 2, 6, 7</th>
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<tr>
<td>Problems</td>
<td>Ch 2: 2, 6, 10, 12</td>
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<td>Appendix A: 3, 5, 10, 12</td>
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<td>Assignment</td>
<td>week 1 assignment due next class</td>
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**Week 2: Demand and supply basics: price determination**
Fundamental model of competitive markets, demand and supply curves; market determination of price and market equilibrium.

<table>
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<th>Reading</th>
<th>Ch 3</th>
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<td>Appendix B</td>
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<tr>
<th>Review Questions</th>
<th>Ch 3: 4, 8, 13</th>
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<tr>
<td>Problems</td>
<td>Ch 3: 3, 5, 6, 9, 14, 15, 16</td>
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<td>Appendix B: 5, 6, 11</td>
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<tr>
<td>Assignment</td>
<td>week 2 assignment due next class</td>
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**Week 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.

<table>
<thead>
<tr>
<th>Reading</th>
<th>Ch 4</th>
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<tr>
<td>Appendix C</td>
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<td>Ch 5</td>
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<td>Appendix D</td>
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<td>Ch 6 up to page 140</td>
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<tr>
<th>Review Questions</th>
<th>Ch 4: 8</th>
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<td>Ch 5: 7, 14</td>
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<td>Ch 6: 3</td>
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| Problems         | Ch 4: 3, 4, 7, 19                              |
|                  | Ch 5: 14                                      |
|                  | Ch 6: 1                                      |

| Discussion       | as assigned by instructor                    |
**Video:** Coffee market problem
**Assignment:** week 3 assignment due next class

**Week 4: Policy interventions: taxes and subsidies**
What happens when policy interventions interfere with supply or demand? Tax incidence, deadweight loss and efficiency.

**Reading:**
- Ch 6
- Ch 20 up to page 503

**Review Questions:**
- Ch 6: 6, 8

**Problems:**
- Ch 6: 11, 14, 21, 22

**Video:** Dog walking problem
**Assignment:** week 4 assignment due next class

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**Week 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.

**Reading:**
- Ch 8 pages 197-198
- Ch 12 up to page 288
- Ch 13 up to page 311

**Review Questions:**
- Ch 8: 4, 5
- Ch 12: 5
- Ch 13: 5

**Problems:**
- Ch 8: 4
- Ch 12: 10, 11
- Ch 13: 5

**Assignment:** week 5 assignment due next class

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**Week 6: Production (continued); International trade and tariffs**

**Reading:**
- Mankiw Ch 14 pages 279-284 (in Readings Folder)
- Ch 17

**Review Questions:**
- Ch 13: 11
- Ch 17: 4, 9

**Problems:**
- Ch 13: 14
- Ch 17: 3, 5, 9

**Discussion:** as assigned by instructor

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**Week 7: Midterm examination (covers weeks 1-6)**
**Week 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.

**Reading:**
- Ch 7
- Ch 8
- Ch 23
- Additional reading in READINGS folder

**Review Questions:** Ch 7: 6, 8

**Problems:** Ch 7: 6, 8, 9

**Assignment:** week 8 assignment due next class

**Week 9: Labor markets**
Labor market demand and supply; marginal productivity; human capital theory; compensating differentials; labor market discrimination. Real versus nominal wages.

**Reading:**
- Ch 16
- Ch 21 page 546 onwards
- Additional reading in READINGS folder

**Problems:** Ch 16: 1, 2, 4, 7, 9, 11

**Discussion:** as assigned by instructor

**Assignment:** week 9 assignment due next class

**Week 10: Imperfect competition**
Long run costs and returns to scale. Overview of market structures; monopoly; price discrimination; oligopoly.

**Reading:**
- Ch 12 page 289 onwards
- Ch 14
- Ch 15 pages 371-375, 378

**Review Questions:** Ch 14: 3, 12
- Ch 15: 15

**Problems:** Ch 12: 15, 16
- Ch 14: 5, 11, 12

**Discussion:** as assigned by instructor

**Assignment:** week 10 assignment due next class
Week 11: Game Theory and Strategic Behavior  
Decision-making with interdependency, game theory, payoff matrices, decision trees. Auctions.

Reading: Ch 9  
Ch 15 pages 375-377  
Additional reading in READINGS folder  

Review Questions: Ch 9: 3, 5  
Problems: Ch 9: 3, 4, 11, 12  
Ch 15: 12  
Assignment: week 11 assignment due next class  

Week 12: Asymmetric information and incentives  
Asymmetric information; moral hazard and adverse selection in insurance markets and the workplace; principal-agent problems and incentives.  

Reading: Ch 10  
Ch 11 page 258 onwards  

Review Questions: Ch 10: 6, 9  
Ch 11: 12, 16  

Problems: Ch 10: 5, 13  
Ch 11: 12, 16, 17  

Discussion: as assigned by instructor  
Assignment: week 12 assignment due next class  

Week 13: Externalities  
Positive and negative externalities; remedies involving market incentives; role of property rights.  

Reading: Ch 18  
Review Questions: Ch 18: 2, 4, 10  
Problems: Ch 18: 3, 4, 6  

Discussion: Tradable permits exercise - prepare your auction strategy before class.  
Video: Dry cleaning problem  
Assignment: week 13 assignment due next class  

Week 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.  

Reading: Ch 19  
Review Questions: Ch 19: 7  
Problems: Ch 19: 1, 2, 7, 13  
Discussion: as assigned by instructor  

Week 15: Final examination (weeks 1-14)
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-/D 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.