# Syllabus for PPHA 58101 Economic Analysis 1: Microeconomics Fall, 2021

Professor Ryan Kellogg (he/him) Email: <u>kelloggr@uchicago.edu</u>

Class meetings: Tuesday 6:00pm Office Hours: Tuesday 5:00 – 5:50pm

Office Hours on zoom by appointment only Monday 7:00 – 8:00pm

**Teaching assistant:** Victor Gamarra (vgamarrae@uchicago.edu)

TA Office Hours: TBD

## **Course summary and goals:**

PPHA 58101 is the first course of a three-quarter sequence in economic analysis. By the end of this course, you will be able to:

- Understand the strengths and shortcomings of markets as a way to allocate goods and services
- Think critically about incentives and how consumers and firms might respond to incentives in practice
- Apply micro-economic thinking to policy questions
- Be prepared for future coursework in economics and for a future career in economics and policy

We will achieve these goals using both theoretical models and applications. We use models because they help us distill the essential features and economic forces that govern a particular economic situation. Models add rigor to our thinking and help sharpen our intuition for economic phenomena. We will illustrate both the value and the limitations of models by discussing how they inform applied economic and policy problems. I will often draw applications from the realm of energy and environmental economics and policy. I focus on this policy area because: (1) the provision of affordable, reliable energy to the global population, while minimizing environmental harm, is one of the great challenges facing humanity; and (2) the fact that my own research focuses on energy and the environment allows me to better discuss these issues. That said, during the quarter we will draw on examples from a variety of subject areas, including inequality, education, housing markets, and COVID-19.

#### **Textbook:**

The required text for this course will be the third edition of <u>Microeconomics</u> by **Goolsbee**, **Levitt, and Syverson** (which we will hereafter refer to as **GLS**). The ISBN-13 identifier for the book is 978-1-319-10556-3. The second edition of GLS is a viable substitute, but some of the chapter and section numbers may have changed.

We will also use the online resources developed by the CORE project (<a href="https://www.core-econ.org/">https://www.core-econ.org/</a>), especially their introductory e-textbook available at <a href="https://core-econ.org/the-economy/book/text/0-3-contents.html">https://core-econ.org/the-economy/book/text/0-3-contents.html</a>.

### **Class format:**

The course consists of 9 <u>modules</u>, one for each week of the quarter. Each module will have the following components:

- Class meetings: Each module is centered on our class meetings that will occur on Tuesday evenings. Each meeting will be for roughly 2 hours. In these meetings, we will:
  - Address students' questions about the recorded lectures (based on questions posted to the Canvas discussion board)
  - Engage in discussions about economics and policy applications

To maximize the quality of our class meetings, it is <u>essential</u> that students arrive having completed all the necessary preparation. This pre-meeting work for each module includes: (1) completing the readings for the module; (2) viewing the recorded lectures; (3) taking self-assessment quizzes; and (4) engaging in the Q&A on the Canvas discussion board. These components are described below. The quality of our in-class discussions will be maximized when students come to class fully prepared.

- **Readings**: Each module will be tied to specific sections of the textbook (GLS) and will potentially also include readings from the CORE project and other outside sources.
- Recorded lectures: At least one week before the module's live sections, I will post recordings that you may watch and engage with as many times as you like. A typical week will involve several recorded lectures, which will typically be 10-20 minutes in length. To get the most out of these recordings, it is essential that you treat them as you would an in-person lecture, and not treat them like watching a movie. For instance, I will often use a virtual whiteboard rather than slides. To stay engaged with the material, you should follow along and take notes of your own as I write on the whiteboard.
- **Self-assessment quizzes:** Each module (except the first) will include quizzes that you should take to test your understanding. I will provide answers to all quizzes. If you have trouble answering a question, that is a sign that you should review the relevant material (in the recordings, readings, or both) and/or post a question onto the Canvas discussion board. Completion of these quizzes will count towards your final grade in the course (see more on this below).

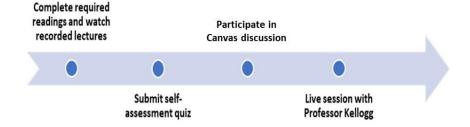
• Canvas discussion board: After viewing the recordings and taking the self-assessment quizzes, you should use the Canvas discussion board to ask questions. You can ask me and the TA to clarify material that was confusing. You can also ask about what the recorded material might imply for a public policy issue.

Before posting a question on the discussion board, you should first review other students' questions to see if your question has been asked (and potentially answered). I also encourage you to "upvote" questions you see that you would also like to ask. I will discuss widely-asked questions during our class meetings.

• Office hours: The TA and I will hold regular weekly office hours to interact with students one-on-one or in small groups. I will hold open-access office hours in the Convene open space on Tuesdays from 5:00 – 5:50pm before class. I will also hold office hours over zoom on Monday evenings from 7:00 - 8:00pm. Students can reserve 10 minute slots for these office hours via Calendly (link available on the course's Canvas site). The TA's office hours are TBD.

To see how these components fit together into a module, consider the schedule we will use for module 2:

- Class meeting: Tuesday, October 5
- Readings and recorded lectures posted no later than Tuesday, September 28
- Self-assessment quiz and Canvas discussion opens Tuesday, September 28
- Self-assessment quiz closes Tuesday, October 5 at 6:00pm



## Assignments and grading

Grades will be based on the self-assessment quizzes, problem sets, writing assignments, and a final exam. All assignments except the quizzes should be submitted through Gradescope as a single pdf document.

**Quizzes:** You will receive credit for completing the self-assessment quizzes on Canvas. Your grade on each quiz will be based on whether you completed it, not whether your answer was correct. To achieve full credit on this part of the course, you must complete 6 of the 8 quizzes.

**Problem sets:** There will be three problem sets due throughout the quarter. They are due at the following dates and times. **Late submissions will not be accepted.** 

- Problem set 1: Tuesday, October 19, 6:00pm
- Problem set 2: Tuesday, November 2, 6:00pm
- Problem set 3: Tuesday, November 30, 6:00pm

These problems sets are designed to give you practice working with economic models and thereby help you learn the material. You may discuss problem sets with other students in the class, but the solutions you submit must be your own work. I strongly encourage you to work on the problems yourself before collaborating with others.

You will get full credit a given problem set if you demonstrate serious effort on each problem, even if your answer is not correct. I will post solutions to each problem set after they are due.

Writing assignment: The writing assignment is designed to encourage you to apply economic concepts to a current public policy issue. It is due on Tuesday, November 9 at 6:00pm. Late submissions will not be accepted.

You may do the writing assignment individually, or if you wish you may collaborate in a group of no more than three students. If you work in a group, you should turn in a single assignment for the group, and all students in the group will receive the same grade. You may not discuss this assignment at all with any student outside of your group.

Each submission must be no longer than 1500 words, in addition to any graphs you wish to include.

**Final exam:** The final exam will be open book and open notes. However, you may not collaborate with classmates or any other individual. You will be able to choose when to take the exam anytime within the window Friday Dec 3 8:00am to Wednesday Dec 8 10:00pm. Once you begin, you must complete the exam in two hours.

## Letter grades

At the end of the course, each of the four components (quizzes, problem sets, writing assignments, and the exam) will have numerical grades out of 100 possible points each. Each student's numerical score will then be determined by a weighted sum of the assignment scores as follows:

- For students who did better on the writing assignment than the exam, the weights will be 15% on the quizzes, 15% on the problem sets, 45% on the writing assignment, and 25% on the exam.
- For students who did better on the exam than the writing assignment, the weights will be 15% on the quizzes, 15% on the problem sets, 25% on the writing assignment, and 45% on the exam.

This grading scheme therefore puts higher weights on the assignment on which each student performed more strongly. This approach rewards students' best efforts and mitigates the harm to a grade that can come from a single bad assignment. Uri Simonsohn calls this type of grading scheme TWARKing. To read more about it, see <a href="http://datacolada.org/56">http://datacolada.org/56</a>. (And thanks to my colleague Anthony Fowler for telling me about TWARKing.)

After the assignment weights are applied, each student will have a grade out of 100 points. A score of 90 points will ensure an A-, 80 points will ensure a B-, and 70 points will ensure a C-.

#### Class outline

Module 1 (class meeting: Sept 28): Class introduction. Broad discussion about the strengths and shortcomings of markets

Module 2 (class meeting: Oct 5): Supply, demand, and competitive equilibrium

Module 3 (class meeting: Oct 12): Welfare, surplus, and Pareto efficiency. Externalities.

Module 4 (class meeting: Oct 19): Elasticities. Price control policies.

Module 5 (class meeting: Oct 26): Taxes and subsidies.

Module 6 (class meeting: Nov 2): Production decisions. Marginal vs average cost.

Module 7 (class meeting: Nov 9): Monopoly behavior and market power

Module 8 (class meeting: Nov 16): Firm entry and exit; monopoly regulation

Module 9 (class meeting: Nov 30): More on market power and monopoly regulation

# **Academic dishonesty**

All University of Chicago students are expected to uphold the highest standards of academic integrity and honesty. Among other things, this means that students shall not represent another's work as their own, use unhallowed materials during exams, or otherwise gain unfair academic advantage. All students suspected of academic dishonesty will be reported to the Harris Dean of Students for investigation and adjudication. The disciplinary process can result in sanctions up to and including suspension or expulsion from the University. In addition to disciplinary sanctions, students who commit academic honesty will receive, at minimum, the following grade penalties:

- If the academic dishonesty occurred on a problem set, the student will receive a score of zero on that problem set, and the student's highest possible letter grade for the course will be a C+.
- If the academic dishonesty occurred on a writing assignment or the final exam, the student will receive a grade of F in the course.

The University's policy and procedures related to academic integrity can be found at <a href="https://studentmanual.uchicago.edu/academic-policies/academic-honesty-plagiarism/">https://studentmanual.uchicago.edu/academic-policies/academic-honesty-plagiarism/</a>.

## Contesting a grade

If you would like to contest a grade, you must do so in Gradescope within one week of receiving your grade for that assignment or exam. To submit a Regrade Request, first click on the question that you wish to submit a request for in Gradescope. This will display the rubric for that question and highlight the rubric items that were applied. Once a question has been selected, click the Request Regrade button in the bottom action bar. A textbox will appear allowing you to type an explanation of the request for the specific question that was chosen. See <a href="https://help.gradescope.com/article/8hchz9h8wh-student-regrade-request">https://help.gradescope.com/article/8hchz9h8wh-student-regrade-request</a> for detailed guidance.

Gradescope will sum up the total points automatically for each assignment. If you assert that we erred in how many points we awarded to an answer on a specific question (or part of a question), the TA will regrade your entire assignment, at which point your grade may go up or down.

We will not respond to regrade requests submitted more than one week after receiving your grade.

## **Accommodations for disabilities**

I am committed to providing reasonable accommodations that enable qualified students with a disability to have equal participation in my class and an opportunity to demonstrate their knowledge and skill on the assignments. Students who believe they need assistance should consult with <u>Student Disability Services</u> by the end of the first week of class. SDS will then coordinate student accommodations with myself, the TAs, and Harris staff.

#### **UC** student resources

If you or someone you know is feeling overwhelmed, depressed, and/or in need of support, counseling services are available. Student Counseling Service (SCS) urges you to attend to your mental wellbeing and to reach out to them for support during these challenging times. All SCS services are covered by the Student Life Fee, and there is no additional cost for students to access their services. See <a href="https://wellness.uchicago.edu/mental-health/student-counseling-service-spring-quarter-faq/">https://wellness.uchicago.edu/mental-health/student-counseling-service-spring-quarter-faq/</a>. Students seeking new services/resources can call 773.702.9800 during business hours (Monday–Friday 8:30 a.m.–5 p.m.) and ask to speak with a clinician. Students needing urgent mental health care can speak with clinicians over the phone 24/7 by calling the SCS at 773.702.3625.

## **Diversity and Inclusion**

I am committed to creating a learning environment that welcomes diverse viewpoints and where each of you feels seen, heard, and respected no matter your race, ethnicity, national origin, gender identity, sexual orientation, disability, religion, socio-economic background, or social and political beliefs. More broadly, the Harris School and I believe that rigorous inquiry and effective public policy problem-solving requires the expression and understanding of diverse viewpoints, experiences, and traditions. The Harris School's commitments to lively, principled, and respectful engagement are available <a href="here">here</a>.