Advanced Microeconomics for Policy Analysis I

Fall 2020

PPHA 44100 Section 1 – Mondays 8:00 - 9:20 am Chicago time

Instructor: Francisco Espinosa.
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Please put “PPHA 441” in the subject line for correspondence related to the course.

TAs: Pepi Pandiloski – ppandiloski@uchicago.edu, Vincent Tanutama – tanutama@uchicago.edu

TA sessions: TBD with the students.
Office hours: TBD with the students.

Online scheme: The lectures will be delivered 100% remotely. We will use a “flipped classroom” model: Each week, the students will be asked to watch two pre–recorded lectures. The lectures will be uploaded to the Canvas site together with the corresponding slides, which will serve as transcripts and will allow students to re-watch material that they are uncertain about as many times as they need. Each lecture will consist of a single video of, at most, 1 hour and 20 minutes.

Once a week, on Mondays, we will have an 80–minute live discussion session during regular class time (8:00-9:20am, Chicago time) in which we can discuss the two pre-recorded lectures. Students are required to watch the videos before that week’s discussion session. The second video of the week will be uploaded at least 24 hours before that week’s Q&A session. We will also work with an online spreadsheet, where the students can upload their questions in advance, before that week’s discussion session.

The students have to register in advance in order to attend the Zoom meetings. Registering is only required once. After the request is approved, the student can attend all following meetings.

Before the beginning of the quarter, a link will be distributed to register to our online meetings. After registering, you will receive a confirmation email containing information about how to join the meeting.

Hopefully, this is a system that will prove convenient for most of the students. If this is not the case, we can definitely reconsider the way we want the lectures to be delivered. The students’ feedback about this point will be particularly appreciated.

Office hours (Francisco): Office hours will be also held 100% remotely. We will use regular class time for questions (see “Online scheme” above), but if a student or group of students wants to meet individually, we can arrange a Zoom meeting.

Requirements: The course has two requirements:
• Problem sets (50% of the final grade):
  
  **Submission:** There will be up to eight problem sets during the quarter. They are due at 8:00 am on Wednesdays. You will have to upload your solution to the Canvas site before the deadline. The new problem set will be uploaded to our Canvas site on Wednesday night the week before it is due. No late problem sets will be accepted, and there are no make-up problem sets.

  **Working in groups:** I encourage you to work in groups (preferably no more than 5 students per group) as long as all group members are clearly listed and each group member submits their own copy. However, you should try out the problems by yourselves, before discussing them in groups, to make sure you understand them.

  **Typing:** I strongly recommend you to type your problem sets in \LaTeX. If you do so, you have time to submit your problem set until Wednesday midnight (12:00am), instead of Wednesday 8:00 am. Only typed problem sets will be accepted after 8:00 am.

  If you are not familiar with \LaTeX, don’t worry: your TAs will introduce you to the basics during the recitation session of the second week of classes. Getting used to typing in \LaTeX will be a very valuable by-product of this class.

• Final exam (50% of the final grade): There will be a final exam. There is no midterm.

**Grading policy:** In the absence of any violations of academic integrity and honesty (see below), the distribution of course grades will be as close as possible to the following one:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>1/8</td>
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<tr>
<td>A-</td>
<td>1/4</td>
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<tr>
<td>B+</td>
<td>1/4</td>
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<tr>
<td>B</td>
<td>1/4</td>
</tr>
<tr>
<td>B- and below</td>
<td>1/8</td>
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**Prerequisites:** Intermediate micro (at the level of, e.g., Varian’s *Intermediate Microeconomics*) and multivariate calculus (including Lagrange multipliers, vectors and matrices, and implicit differentiation). Elementary real analysis will be helpful.

Your TAs will go over a math review during the first recitation session.

**Readings:** I will not be following any one textbook very closely. The main reference for the first half of the course are the Lecture Notes (based on Scott Ashworth’s notes for this course). They will be distributed through Canvas as we move forwards. For the second half, the notes will be supplemented with *Lectures on Microeconomics: The Big Questions Approach* by Romans Pancs.

Other useful references are *Essential Microeconomics* by John Riley and *Lecture Notes in Microeconomic Theory: The Economic Agent* by Ariel Rubinstein (which can be downloaded at no charge from Rubinstein’s website – just follow the link). The canonical reference work for this material is *Microeconomic Theory* by Andreu Mas-Colell, Michael D.
Whinston, and Jerry R. Green, in which you can find all the technical details (and much more).

**Schedule (tentative):**

An approximate schedule of topics and readings follows; N refers to the lecture notes and P refers to Pancs. The other links are to a few papers for supplemental reading.

**The core:**

1. Introduction and rational preferences (N pp. 4–10)
2. Choices and utility (N pp. 10–17)
3. Expected utility (N pp. 28–37)
4. Risk aversion (N pp. 37–47)
5. Stochastic dominance (N pp. 47–54, and “additional notes”)
6. Preferences over commodity bundles (N pp. 58–62)
7. Solving the consumer’s problem (N pp. 62–67)
8. The envelope theorem and Shepard’s lemma (N pp. 142–152)
10. Technology and profit maximization (N pp. 78–85)
12. Exchange economies and welfare theorems (N pp. 122–133)
13. Social choice (N pp. 113–122)
15. Existence, uniqueness, and stability of Walrasian equilibrium (P 1.9–1.10)
16. Time and uncertainty (P 1.11)

**Extra, possible topics:**

a. The core convergence theorem (P 4.3; Mankiw vs. Weinstein)
b. The jungle economy (P 3.2–3.3; Piccione and Rubinstein)
c. Matching and assignment (P 3.2–3.3; Roth vs. Cherrier)
d. Distributive justice (P 8.2, 9.2)
Review:

20. Catch-up and review

**Ethical Academic Conduct:** 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, the student who has committed academic dishonesty will receive a grade of 0 on the exam or problem set in question and cannot earn higher than a B- in the course, regardless of their performance on other assignments and exams. The Harris policy and procedures related to academic integrity can be found here.

By taking this course, you explicitly pledge your honor that you will not cheat (or help others to cheat) in any way on the assignments/exams.

**We adhere to the official Harris School protocol for ethical violations:**

“First Violation

If a student is accused by an instructor or teaching assistant of plagiarism, cheating, or any other form of academic dishonesty, the student will be summoned to meet with the Dean of Students and the instructor. In the meeting, the student and instructor both present information about the situation. If it is determined by the instructor and the Dean of Students that the student has, in fact, plagiarized or cheated, the following sanctions will be imposed for the first violation.

- The student will generally receive a grade of 0 on the assignment or exam in question. Please note that grading decisions are fully at the discretion of the instructor, who may decide to impose harsher grade penalties.

- The student may be asked to re-do the assignment or retake the exam (without credit) to ensure that the student has learned how to properly cite sources or demonstrate that he or she has command of material covered.

- A formal letter of finding is sent to the student stating that the student has been found in violation of the code of academic honesty and what the sanctions were. The letter, along with any evidence presented, is archived in Harris Student Affairs records until the student graduates if the student has no other violations.

- Students found in violation of the academic honesty policy are not permitted to withdraw from the course to avoid grade penalties from the instructor.

- In cases where plagiarism or academic dishonesty is egregious, the case may be referred to the Area Disciplinary Committee even on a first offense. The Dean makes all decisions about which cases will go before the Area Disciplinary Committee.
Second Violation

If a student who has already been found in violation of academic dishonesty is again accused of academic dishonesty, the case will be sent to the Harris Area Disciplinary Committee. Details about the Area Disciplinary Committee procedures can be found in the University Student Manual. Information about the first violation, including the formal letter of finding any evidence, will be presented to the Area Disciplinary Committee, along with evidence of the current allegation. If the student is found in violation of academic honesty a second time, the Area Disciplinary Committee can assign sanctions including suspension or expulsion from the University.

Academic Dishonesty Appeals

If a student has been found in violation of academic honesty and does not believe that either the finding or the sanction is fair or correct, the student has the right to appeal the finding by requesting a hearing from the Area Disciplinary Committee.”

University of Chicago Policy on Academic Honesty & Plagiarism
https://studentmanual.uchicago.edu/academic-policies/academic-honesty-plagiarism/

Full Harris Academic Integrity Procedures from online student Handbook accessible at https://harris.uchicago.edu/gateways/current-students/policies