Analytical Politics I:
Strategic and Theoretical Foundations

Fall 2020

Course Description This course has four objectives, three substantive and one methodological. The three major substantive themes of the course are (i) the normative foundations of policy making, (ii) how strategic interactions give rise to social dilemmas that create room for public policy to improve social welfare, and (iii) how technological, political, and institutional factors constrain policymakers and sometimes prevent good policies from being enacted.

Methodologically, the course introduces basic game theory. Game theory is the mathematical tool used to study situations of strategic interdependence, which is most of life. As such, it is critical for understanding the substantive issues discussed above. In addition, understanding basic game theory is a valuable skill in its own right for policy professionals. It helps us predict and understand how people and organizations will behave in response to changes in the policy environment.

Participating in Class There are several components to participating in class.

- **Reading** There are assigned readings for every week which you are expected to complete before class.
- **Lectures and Quizzes** There are recorded lectures for each week which you should watch before class. The lectures will have quizzes interspersed which you should also complete. You will be evaluated on whether you complete these quizzes, though not on whether your answers are right or wrong.
- **Questions** If you have questions based on the readings and lecture, please submit them directly to Canvas by Tuesday morning at 10 AM Central time. Post them under the appropriate week under the Discussions tab. We will plan to address common questions in discussion sections.
- **Attending Class** We meet together once a week. There is an expectation that students in this course will be actively engaged and on camera while on Zoom. If a student requires an exception, reach out to the instructor directly.

Course Requirements The course has three requirements: participation, problem sets, and two exams.

- **Problem Sets** There will be four problem sets during the quarter. They must be submitted to Canvas by Wednesday at 5 PM (Central) of the week after they were assigned. A few guidelines for the problem sets:
– We strongly encourage you to work in a problem set group. If you work in a group, you may turn in a single problem set for the whole group. **Groups that turn in a joint problem set can be no larger than four people. If you turn in an individual problem set, it may not be identical to another student’s problem set.**

– For the sake of your heroic TAs, who check huge numbers of problem sets at a time, please write your answers to problems in a linear, concise, and readable form. This will often mean you have to rewrite your answer after solving it. Doing so is an act of kindness.

**Exams** There will be two take-home exams, a midterm and a comprehensive final. TA sessions the week prior to exam will be review sessions. We will make at least one sample exam available a week prior to the exams.

**Course Materials** The required textbook for the course is


Ethan designed this book for this course, so we think it makes sense to use it. That said, he has no interest in profiting from your purchase of his book. To put his money where his mouth is, so to speak, he will donate to charity 100% of the royalties he receives from sales of this book to Chicago students. Which charity he donates to will be determined by members of the class in a way we will fill you in on during the course of the quarter. (His only rule is that he has a veto over charities that he finds personally objectionable. In this event, he will simply ask the group to choose a different charity. This has never happened.)

There are additional readings for many topics. These are available on Canvas.

**Grades & Grading** Grading will be based on the course requirements as follows: final exam (35%), midterm exam (25%), problem sets (25%), completing the quizzes interspersed in the lecture (15%).

We will make every effort to return assignments and exams within a week.

If you believe that your grade on an assignment or exam question is incorrect or unfair, please submit your concerns in writing to the head TA within a week of the assignment or exam being returned. Fully summarize what you believe the problems are and why. The head TA and the TA responsible for the relevant question will respond in writing. If you still have concerns, you may submit them in writing to the professor, who will issue a final grade.

Core courses at the Harris School are graded on a rough curve. The basic target distribution is: $A [\frac{3}{4}], A- [\frac{3}{5}], B+ [\frac{4}{5}], B [\frac{5}{6}], B- or lower [\frac{6}{6}]$.

**Academic Integrity** The Harris School has a formal policy on academic integrity that you are expected to adhere to. Examples of academic dishonesty include (but are not limited to) turning in someone else’s work as your own, copying solutions to past years’ problem sets, and receiving any unapproved assistance on exams. Academic dishonesty will not be tolerated in this course. All cases of cheating will be referred to the Dean of Students office, which may impose penalties per the Harris School Disciplinary Procedures. If you have any questions regarding what would or would not be considered academic dishonesty in this course, please do not hesitate to ask.
Diversity and Inclusion  Consistent with the University of Chicago’s commitment to open discourse and free expression, we encourage students to respect and engage with others of differing backgrounds or perspectives, even when the ideas or insights shared may be viewed as unpopular or controversial. Thought-provoking discourse is facilitated when we not only speak freely but also to listen carefully and respectfully to others.

Recording and Deletion Policy  The Recording and Deletion Policies for the current academic year can be found in the Student Manual under Petitions, Audio & Video Recording on Campus.

- Do not record, share, or disseminate any course sessions, videos, transcripts, audio, or chats.
- Do not share links for the course to those not currently enrolled.
- Any Zoom cloud recordings will be automatically deleted 90 days after the completion of the recording.

Accessibility  The University of Chicago is committed to ensuring equitable access to our academic programs and services. Students with disabilities who have been approved for the use of academic accomodations by Student Disability Services (SDS) and need a reasonable accomodation(s) to participate fully in this course should follow the procedures established by SDS for using accommodations. The starting point is to contact disabilities@uchicago.edu. Timely notifications are required in order to ensure that your accommodations can be implemented.

Course Schedule

Normative Frameworks

Week 1 – Normative Frameworks

Watch: Introductory Lecture

Watch: Normative Frameworks Lecture


Week 2 – Pareto Concepts

Watch: Pareto Concepts Lecture

Read: PEPP, Chapter 3


Problem Set 1 Distributed
Game Theory and Social Dilemmas

Week 3 – Game Theory 1: Nash Equilibrium

Watch: Game Theory 1 Lecture
Read: PEPP, Appendix A

Problem Set 1 Due

Week 4 – Externalities

Watch: Externalities Lecture
Read: PEPP, Introduction to Part II and Chapter 4.1–4.3

Problem Set 2 Distributed

Week 5 – Coordination Problems

Watch: Coordination Lecture
Read: PEPP, Chapter 5


Problem Set 2 Due

Midterm distributed on Friday of Week 5 and due by Wednesday at 5 PM (Central) of Week 6

Week 6 – Game Theory 2: Subgame Perfection

Watch: Game Theory 2 Lecture
Read: PEPP, Appendix B.1–B.4

Week 7 – Commitment Problems

Watch: Commitment Problems Lecture
Read: PEPP, Chapter 6


Problem Set 3 Distributed

Governance Dilemmas

Week 8 – Political Institutions and Incentives

Watch: Political Institutions Lecture
Read: PEPP, Introduction to Part III, Chapter 11.1–11.2

Problem Set 3 Due
Problem Set 4 Distributed

Week 9 – Foreign Aid: Policy and Politics

Watch: Foreign Aid Lecture

Read: PEPP, Chapter 11.3–11.4


Problem Set 4 Due

Take home final exam during finals week