

ECON 1200: Game Theory

Evan Piermont

Summer 2015

OVERVIEW

Instructor	Evan Piermont	Class Meeting Time	Tuesdays and Thursdays
Office	4521 W.W. Posvar Hall		6:00PM - 8:30PM
Email	ehp5@pitt.edu	Lecture Location	4716 W.W. Posvar Hall
Website	http://www.pitt.edu/~ehp5	Office Hours	Tuesdays 2:00PM - 4:00PM

Course Goals: This course is an introduction to game theory, the study of strategic behavior among parties having opposed, mixed or similar interests. This course will sharpen your understanding of strategic behavior in encounters with other individuals. You will learn how to recognize and model strategic situations, to predict when and how your actions will influence the decisions of others and to exploit strategic situations for your own benefit. The course aims to provide a basic understanding of the language and concepts of game theory, as well as providing some surveys of important theoretical models within the field.

Textbook: We will not be formally following any textbook. As a reference, I recommend “An Introduction to Game Theory” by Martin J. Osborne, Oxford University Press, 2004. It is available on [Amazon](#) and elsewhere. We will, however, follow a set of lecture notes that will be posted throughout the course.

REQUIREMENTS

Assessment: The final grade will be based on the following:

Homework	30%
Midterm Exam	30%
Final Exam	40%

Homework: There will be 5 homework assignments. They will be posted on Thursday and will be due the following Tuesday at the beginning of class. Each assignment will be coarsely graded out of 6. Solutions will be provided, so that you can see where you went wrong. Late homework assignments will not be accepted.

Exams: There will be two exams: a midterm and a final. The tentative dates are July 9th for the Midterm and July 30st for the Final. Both will be in class at the normal time and location. The midterm will be $1\frac{1}{4}$ hours (half a class) and the final will be $2\frac{1}{2}$ hours (a full class). The exams will be in similar style to the homework questions.

COURSE OUTLINE

The tentative schedule of lectures is as follows:

Tuesday, June 23	Introduction, Math Review, Utility Representations of Preference, Definition of a Game, Game Theoretic Notation
Thursday, June 25	Best Response, Domination, Nash Equilibrium
Tuesday, June 30	HW1 Due Beliefs, Mixed Strategies, Expected Payoff
Thursday, July 2	Extensive Form Games, Information Sets and Normal Form Equivalence
Tuesday, July 7	HW2 Due Backwards Induction, Subgame Perfection, Applications
Thursday, July 9	Midterm Exam
Tuesday, July 14	HW3 Due Repeated Games, Infinitely Repeated Games, Folk Theorems
Thursday, July 16	Games of Incomplete Information: Motivations and Theory
Monday, July 20	HW4 Due Games of Incomplete Information: Signaling and Strategic Communication
Thursday, July 23	No Class
Tuesday, July 28	HW5 Due Behavioral Considerations and Extensions, Review for Final
Thursday, July 30	Final Exam

COURSE POLICY

Academic Integrity: Students in this course will be expected to comply with the University of Pittsburgh's [Policy on Academic Integrity](#). Any student suspected of violating this obligation for any reason during the semester will be required to participate in the procedural process, initiated at the instructor level, as outlined in the University Guidelines on Academic Integrity. This may include, but is not limited to, the confiscation of the examination of any individual suspected of violating University Policy.

Disability Information: If you have a disability that requires special testing accommodations or other classroom modifications, you need to notify both the instructor and the [Disability Resources and Services](#) no later than the 2nd week of the term. You may be asked to provide documentation of your disability to determine the appropriateness of accommodations. To notify Disability Resources and Services, call 648-7890 (Voice or TTD) to schedule an appointment. The Office is located in 140 William Pitt Union.