Economics 212 – Game Theory – Syllabus v2
Spring 2017
Professor Steven Matthews
University of Pennsylvania

Description. The object of game theory is to understand situations in which a person's behavior affects the optimal behavior of others. In this course we study the theory and its applications to economics, political science, and law.

Prerequisites. Econ 101 and Math 114/115, in a previous semester.

Class Times. Tuesday/Thursday, 10:30-12 noon, in ANNS 111.

Professor. Steven Matthews, stevenma@econ.upenn.edu.

Teaching Assistant. : Joao Granja de Almeida, joaog@sas.upenn.edu.

Office Hours.
> Professor: Mondays, 3:30-5 pm in 521 McNeil. By appt other days.
> TA: Fridays, 1:30-3:30 pm.

Textbook. *Strategy: An Introduction to Game Theory,* 3rd ed, by Joel Watson. Lecture slides, supplementary readings.

Course Materials. Posted on Canvas: http://canvas.upenn.edu.

Homework. About every two weeks a problem set is due. They are graded on a 1-3 scale. Late homework is not graded. Solution sets are posted on Canvas. Homework is very important for learning.

Exams. Two non-cumulative midterms, and one semi-cumulative final exam that emphasizes the material following midterm 2. All exams are closed book, notes, and electronics.

Grading. 10% for homework, 25% for each midterm, and 40% for the final exam. If you are unable to take one of the midterms for an excused reason, the other one will count 32% and the final exam 58%.

Additional Policies. http://www.econ.upenn.edu/undergraduate/policies

Dates.
> Midterm 1: Tuesday, February 14, in class
> Midterm 2: Thursday, March 23, in class
> Final Exam: Monday, May 1, 12–2 pm.

Tentative Course Outline

Topic	Chapter	Lecture Slides
Representing Games		
Extensive form, strategies	$1-3$	$1-2$
Normal form, beliefs/mixed strategies	$4, 5$	3
Static Games		
Best response, rationalizability, applications	$6-8$	$4-5$
Equilibrium, applications	$9, 10$	6
Mixed strategy equilibrium	11	7
Strictly competitive games	12	8
Contract and law	13	9
MIDTERM 1?		
Dynamic Games		
Extensive forms and subgame perfection	$14, 15$	10
Applications: IO and parlor games	$16, 17$	11
Bargaining games	19	12
Repeated games and applications	$22, 23$	13
MIDTERM 2?		
Incomplete Information Games		
Random events and incomplete information	24, App A	14
Bayesian-Nash equilibrium, applications	$26, 27$	$14-15$
PBE, signaling, reputation	$28, 29$	$14-15$

Chapters Tentatively Skipped: 18, 20, 21, 25