

Spring 2013
Economics 212
Game Theory

Class time and place: Tuesday and Thursday from 1:30-3:00pm at McNeil 286-7

Coverage: The aim of this course is to introduce the basic principles of game theory to you. Game theory has two parts. *First*, it is a language to describe a strategic interaction. It formalizes problems such as: Firm A first sets its price, then Firm B sets its price, then consumers decide where to buy. Game theory, however, is rich enough to describe much more interesting environments, starting from arms races to the problem of finding out which physicians are good. *Second*, game theory proposes solution concepts. It tries to predict what rational players would do if they were faced with the situation. In the example above: Which price should Firm A set? You will see that the basic idea how economists think about the solution to a game-theoretic situation is always the same, with some adjustments to a specific context. The specific context is whether all players act at the same time or subsequently, and whether there are aspects that are known to some players but not to others.

Instructor: Tymofiy Mylovanov, 456 McNeil, mylovanov@gmail.com
office hours: Thursday 3:00-5:00pm or by appointment

Teaching Assistant:
Ju Hu, 424 McNeil, juhu1@sas.upenn.edu, office hours

Text Watson, J., *Strategy: An Introduction to Game Theory*, 2nd edition.

Prerequisites: Econ 101 and Math 114 or 115.

Grading and Exams: Grades will be based on

1. 30%: Midterm exam I, in class on Tuesday, February 14.
2. 30%: Midterm exam II, in class on Thursday, April 2.
3. 10%: Weekly homework assignments.
4. 30%: Final exam, 9-11am, Thursday, May 2.

The final is cumulative but with emphasis on the last part of the course. The exams are closed book (closed everything). The homework assignments are weekly and will be available on blackboard; they will be due at the *beginning* of the class on Thursday. There will be no homework assignments due in the first week and in the midterm weeks. The homework assignments could be discussed but should be written and submitted individually, as hard copies or as pdf files at juhu1@sas.upenn.edu. Answers will typically be posted to blackboard the day the problem set is due. As a result, late problem sets will not be accepted. When computing the average problem set score to calculate the grade, the two lowest individual score will be dropped. This allows for two missed problem sets, if necessary, without adverse consequences.

The departmental policies on attendance, exams, grading appeals, etc., are available at

<http://economics.sas.upenn.edu/undergraduate-program/course-information/guidelines/policies>

No class. There is a chance that there will be no class on one of the days and another class might be substituted by another instructor. If this happens, the dates will be announced as soon as they become known.

Email. Please check your email settings on blackboard to make sure you receive emails. There will be a test email message sent to the class list through blackboard on Monday, January 14.