

Teoría de Juegos

Spring 2016, Piotr Evdokimov

Course Information: This is a course in game theory. We will start with basic concepts such as Nash Equilibrium and gradually move on to more advanced topics. No prior knowledge of game theory is necessary, but a basic comfort level with mathematics is assumed.

Contact Information: You can reach me at pevdokim@gmail.com. My office in ITAM is on the Santa Teresa campus. The office hours are on Tuesday, 14:30-16:30 PM.

Grading: There are three exams. The lowest exam grade is dropped, and the final grade is calculated as the average of the two remaining grades.

Optional Books: *Microeconomic Theory* by Mas-Colell, Whinston and Green, *Game Theory* by Fudenberg and Tirole, *Game Theory* by Myerson, *A Course in Game Theory* by Osborne and Rubinstein.

Note: these books are at a fairly high level, and I do not require that you purchase any of them. Mas-Colell, Whinston and Green is a good purchase if you plan to get a PhD in economics. The game theory books are recommended if you plan to get a PhD in economics and specialize in game theory. Osborne and Rubinstein is available for free online.

Topics:

Strategic (Normal Form) Games

Dominance

Rationalizability

Nash Equilibrium

Correlated Equilibrium

Evolutionary Equilibrium

Perfect Equilibrium

Extensive Form Games

Perfect Recall, Kuhn's Theorem

Subgame Perfect Nash Equilibrium

Sequential Equilibrium

Contract Theory

Bayesian Equilibrium

Auctions

Mechanism Design

Repeated Games

Note: The syllabus is preliminary and subject to change.