Markets and Contests: 
Two Applications of Game Theory

This course focusses on two topics: The efficiency of oligopolistic competition and the theory of contests, a development of game theory that studies conflicts inside or among organizations. Each topic is divided in five parts. Parts denoted by an asterisk (*) are optional and will be lectured only if time permits.

GOALS:
The course has two goals: First, to provide an introduction to the two subjects. Second, to outline some possibilities of research.

GRADING:
1. Assistance to all lectures and presentations is compulsory. Each lack of assistance rests one point to the final count.

2. I will give extra points for good questions. Silly comments will be disregarded with no punishment.

3. Each student must select a paper related with the topics covered in this course. I have veto power on which paper can be chosen, but other than that, students have complete freedom to choose. Presentations will be made at the end of the course, they will last an hour and will be graded between 0 and 10 points. Professional standards of presentation are expected.

4. Those who wish to increase their score can take a written exam with two questions, one from each part below. Each question asks for the presentation of a model and a description of its basic properties. Scores for each part will range between minus one and three points. The student can choose the part or parts she/he will take


For the Contest part: The model of conflict under the Tullock and Hirshleifer contest success functions. Asymmetric contests under proportional contest success functions. The model of cooperative production.
Welfare losses under Imperfect Competition


4. Welfare Losses under Horizontal and Vertical Differentiation.


Contests


4. Applications\(^{(a)}\). Contests between groups. Litigation. Allocation of rights. Rent-seeking in divisionalized firms. Rent-seeking and economic performance


5. War. Rationalist explanations for wars. Consequences of wars. Are democracies more or less prone to wars than autocracies? How to avoid war.


