

Academic Year: ( 2018 / 2019 )

Review date: 10-05-2018

Department assigned to the subject: Economics Department

Coordinating teacher: CORCHON DIAZ, LUIS CARLOS

Type: Electives ECTS Credits : 6.0

Year : Semester :

**REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)**

Mathematics for economists, Game Theory and Microeconomic theory (or Microeconomics).

**OBJECTIVES****ADVANCED MICROECONOMICS : THE THEORY OF CONTESTS**

This course is an introduction to one of the most modern branches of economics, namely Contest Theory. Examples of contests are war, trials, sports, allocation of prizes and political competition. In fact, it can be considered as a mechanism of resource allocation on equal footing as the market or the authority. Only after the development of game theory, this branch of economics could stand on its foot.

During the course, I will emphasize both the applications and the fundamentals of the theory in such a way that the student can incorporate these tools to her/his analytical kit. Also I pretend to contribute to the general economic background of students.

Assistance to all lectures, classes and presentations of the course is compulsory. At the beginning of each class I will pass a sheet to be signed by the students in the first 5 minutes of the class. Each failure to sign will cost 1 point of the final grade unless backed up by a medical certificate. The goal of this is to form the habit of punctuality, an habit which will be of great help in the future career of the student.

**DESCRIPTION OF CONTENTS: PROGRAMME**

Tutorials will be agreed upon with the students.

**OUTLINE OF THE COURSE**

Papers marked with a star a classic papers. Papers with an hyphen in front are surveys or recent stuff.

1.Contests. Definition of a contest. Examples.

- Corchón, L. (2007). "The theory of contests: a survey". Review of Economic Design 11, 69--100.
- Corchon, L. (2017) and M. Serena. "Contests theory: A Survey". Handbook of Game Theory and Industrial Organization. Edward Elgar.

2.Contest Success Functions. Tullock, Linear, Hirschleifer, All pay auction and others. Microfoundations: Axiomatization. The setting of a single decider. Cooperative foundations.

- \* Tullock, G. (1980). "Efficient Rent-Seeking." In J. M. Buchanan, R. D. Tollison and G. Tullock (eds.) Towards a Theory of a Rent-Seeking Society, Texas A&M University Press: 97-112.
- \* Hillman, A. and Riley, J. (1987). Politically Contestable Rents and Transfers. Economics and Politics, 1, 3, 17-39.
- \* Hirshleifer, Jack (1989), "Conflict and Rent-Seeking Success Functions: Ratio vs. Difference Models". Public Choice 63, 101--112.
- \* Skaperdas, S. (1996): "Contest Success Functions". Economic Theory 2, 283-290.
- \* Baye, M., Kovenock, D., de Vries, C. (1996). "The all-pay auction with complete information". Economic Theory, 8, 2, 291-305.
- Clark, D. and C. Riis (1998): "Contest Success Functions: An Extension". Economic Theory 11, 201-204.
- Corchón, L. (2000): "The Allocative Effects of Rent-Seeking." Journal of Public Economic Theory 2, 4, 483-491.
- Corchón, L. and M. Dahm (2010). "Foundations for Contest Success Functions". Economic Theory, 43, 1 81-98.
- Jia, H., Skaperdas, S., Vaidya, S. (2013). "Contest functions: Theoretical foundations and issues in estimation," International Journal of Industrial Organization, 31, 3, 211-222.

- Corchón, L. and C. Beviá (2015). "Relative Difference Contest Success Function". *Theory and Decision*, 78, 377-398, 2015.

3. Properties of Equilibrium and Applications. Symmetric Contests: Existence, comparative statics and uniqueness of equilibrium. Asymmetric Contests: Basic properties in a special case. Applications: Group contests, rent-seeking and economic performance, sabotage. *Biology*

\* Olson, M. (1965): *The Logic of Collective Action*. Harvard University Press. Chapters 1 and 2.

\* Perez-Castrillo, D. and T. Verdier (1992): "A General Analysis of Rent-Seeking Games". *Public Choice* 73, 335-50.

- E. Glaeser, R. La Porta, F. Silanes and A. Shleifer (2004): "Do Institutions Cause Growth? *Journal of Economic Growth* 9, 271-303.

- Cornes, R., and R. Hartley (2005). "Asymmetric Contests with General Technologies." *Economic Theory* 26, 4, 923-946.

- Beviá, C. and L. Corchón (2006). "Rational Sabotage with Heterogeneous Agents". *Berkeley Electronic J. in Theoretical Econ., Topics*. 6, 1.

- Corchón, L. (2007). "The theory of contests: a survey", *op cit*.

- Chowdhury, S.M., Gürtler, O. (2015). "Sabotage in Contests: A Survey". *Public Choice*, 164, 1, 135-155.

- Ostreicher, R., Pruett-Jones, S., Heifetz, A. (2012) "Asymmetric contests at the nest". *Behavioral Ecology and Sociobiology*, 66, 9, 1237-1246.

4. Extensions. Centralized vs decentralized contests. Auctions and contests. Entry. Affirmative action. Networks.

- Azmat, G., and Möller, M. (2009). Competition amongst Contests. *RAND Journal of Economics*, 40, 743-768.

- Yates, A. (2011). "Winner-pay contests". *Public Choice*, 147, 1, 93-106.

- Brown, J. (2011) "Quitters Never Win: The (Adverse) Incentive Effects of Competing with Superstars". *J. of Political Economy* 119, 5, 982-1013

- Franke, J. (2012). The Incentive Effects of Leveling the Playing Field: An Empirical Analysis of Amateur Golf Tournaments". *Applied Economics* 44, 9, 1193-1200.

- Franke, J. (2012). "Affirmative Action in Contest Games". *European Journal of Political Economy* 28, 1, 105-118.

- Calsamiglia, C., Franke, J., Rey-Biel, P. (2013). "The Incentive Effects of Affirmative Action in a Real Effort Tournament". *Journal of Public Economics* 15-31.

- Franke, J. and T. Öztürk (2015). Conflict Networks (2015). *Journal of Public Economics*, 126, 104-113

- Corchón, L., Beviá, C. (2015). "Centralized vs Decentralized Contests". <http://ssrn.com/abstract=2629878> or <http://dx.doi.org/10.2139/ssrn.2629878>.

5. Welfare Properties of Contests. Welfare losses of monopoly and the Coase theorem in rent-seeking societies. The design of optimal contests. Commitment problems.

- Fullerton, R. L., McAfee, P. (1999). "Auctioning Entry into Tournaments". *Journal of Political Economy*, 107, 3, 573-605.

- Corchón, L. (2007). "The Theory of Contests: a Survey", *op. cit*.

- Corchón, L. and M. Dahm (2010). "Welfare Maximizing Contest Success Functions when the Planner Cannot Commit". *Journal of Mathematical Economics*, 47, 3, 309-317.

- Franke, J., C. Kanzow, W. Leininger and A. Schwartz (2014). "Lottery versus All Pay Auction Contests: A Revenue Dominance Theorem". *Games and Economic Behavior* 83, 116-126.

- Nitzan, S. and Mealem, Y. (2015). "Discrimination in Contests". WP

6. Dynamic contests. Two stage contests. Incentives to pre commit. Who should play first? Grand Contests. Endogenous strength.

\* Dixit, A. (1987). "Strategic Behavior in Contests". *American Economic Review*, 77, 5, 891-898.

- Baik, K. and J. Shogren (1992). "Strategic Behavior in Contests: Comment" *American Economic Review*, 82, 1, 359-362.

- Klumpp, T. and M. Polborn (2006). "Primaries and the New Hampshire Effect". *Journal of Public Economics* 90, 1073-1114.

- Konrad, K. (2012). "Dynamic Contests and the Discouragement Effect," *Revue d'économie politique*, 122, 2, 233-256.

- Corchón, L. and C. Beviá (2013). "Endogenous Strength in Conflicts". *International Journal of Industrial Organization*, 31, 3, 195-306.

7. Contests with ties and applications to sports

- Szymanski, S. (2003). "The Assessment: The Economics of Sport". *Oxford Review of Economic Policy*, 19, 4, 467-77.

- Cohen, C. and Sela, A. (2007). "Contests with Ties". *The B.E. Journal of Theoretical Economics*, 7, 1.

- Blavatsky, P. R., (2010). "Contest success function with the possibility of a draw: axiomatization". *J. of Mathematical Economics* 46, 2, 267-276.

- Yildizparlak, A. (2014). "Contests with ties and application to soccer". <https://www.researchgate>.

## 8. Contests with incomplete information

- Malueg, D., and Yates, A., (2004). "Rent seeking with private values", Public Choice, 119, 161--178.
- Wasser, C., (2013). "Incomplete information in rent-seeking contests", Economic Theory, 53, 1, 239-268

## 9. Experiments

- Dechenaux, E., Kovenock, D., Sheremeta, R. (2015). "A Survey of Experimental Research on Contests, All-Pay Auctions and Tournaments". Experimental Economics, forthcoming

## 10. War. Rationalist explanations for wars. Are democracies more or less prone to wars than autocracies? How to avoid war.

- \* Hirshleifer, J. (1991). "The Paradox of Power." Economics & Politics 3, 177--200.
- \* Skaperdas, S. (1992). "Cooperation, conflict, and power in the absence of property rights." American Economic Review 82, 4, 720-739.
- \* Fearon, J. (1995). "Rationalist Explanations for War." International Organization 49: 379-414.
- \* Bueno de Mesquita, B., Smith, A., Siverson, R., and J. Morrow (2003). The Logic of Political Survival. The MIT Press.
- Garfinkel, M. and S. Skaperdas (2007). "Economics of Conflict: An Overview." T. Sandler and K. Hartley (ed.), Handbook of Defense Economics, N. Holland.
- Jackson, M., Morelli, M. (2007). "Political Bias and War." American Economic Review 97, 4, 1353-1373.
- Jackson, M., Morelli, M. (2009). "The Reasons for Wars. An Updated Survey". C. Coyne (ed.) Handbook on the Political Economy of War, Elgar.
- Beviá, C. and L. Corchón (2010). "Peace Agreements without Commitment". Games and Economic Behavior, 68, 469--487.
- Corchón, L. and A. Yildizparlak (2013). "Give Peace a Chance: The Effect of Asymmetric Information on Peace". Journal of Economic Behavior and Organization 92, 116-126

## LEARNING ACTIVITIES AND METHODOLOGY

The course will be divided in three parts.

### 1. Theory classes.

They will last the first ten weeks of the course. There will be a final exam on the material covered in the lectures. In this final exam there will be 5 questions from which the student will have to answer 4. The grade in this exam will be 50% of the final mark. The program is offered below.

### 2. Presentations.

They will be made in the last 4 weeks of the course. Each student has to form a group of 2-3 people and to choose by themselves a paper. Once they do that they will email me with the title and I will decide if it is adequate. Professional level of presentation is expected: no typos, readable slides and a fluent presentation. The grade for this exam will be 25% of the final note. The goal of this part is to contribute to the ability to present in front of an audience something that will be very helpful in the professional life of the student.

### 3. Problems

Students will have to solve a problem at home. Students can use all material they have at their disposal on line or not, as it will happen during her/his professional life. This part will account for 25% of the final grade. The presentation of the problem has to be impeccable as it will happen in her/his professional career.

## ASSESSMENT SYSTEM

### GRADING

50% Final exam

25% Problems

25% Presentation.

Each failure to sign the assistance sheet will be penalized by a point in the final grade.

**% end-of-term-examination:** 50

**% of continuous assessment (assignments, laboratory, practicals...):** 50

## BASIC BIBLIOGRAPHY

- Corchon, L. and M. Marini editors. Corchon, L. (2017) and M. Serena. "Contests theory: A Survey". Handbook of Game Theory and Industrial Organization., Edward Elgar., 2017
- Corchón, L. (2007). "The theory of contests: a survey". , Review of Economic Design , 11, 69--100.