GEORGE MASON UNIVERSITY

Econ 886: Experimental Economics II

Fall 2022

Professor César Martinelli ICES-GMU cmarti330gmu.edu

A. Objective and description

This course develops the main ideas of game theory and its relation with experimental economics. Some emphasis is put on applications to strategic behavior in market environments.

B. References

The main reference for the lectures is the graduate textbook *A Course in Game Theory* by Martin J. Osborne and Ariel Rubinstein, The MIT Press, 1994; some additional papers will be assigned in each lecture. Lectures will be complemented with practice sessions devoted to experiments related to the material covered in class.

C. Syllabus

- 1. Choice under uncertainty
- 2. Strategic games, Nash equilibrium and mixed strategies
- 3. Imperfect competition
- 4. Market games
- 5. Bayesian games
- 6. Auctions
- 7. Extensive games with perfect information
- 8. Bargaining
- 9. Repeated games
- 10. Extensive games with imperfect information
- 11. Coalitional games and the core

D. Grading

Grading will come from an essay due to by the end of the semester (30%), the midterm (30%) and the final exam (40%). If the grade in the final exam exceeds that in the midterm, the grade in the final exam will substitute for the midterm as well. The essay should be a game-theoretic short paper; some topics will be suggested during the lectures.

E. Office hours

I am available most Thursdays from 10 am to 1 pm in my office in Arlington; by appointment any day of the week.