uc3m Universidad Carlos III de Madrid

Cooperation, collective action and formal models of strategy

Academic Year: (2023 / 2024) Review date: 22-11-2022

Department assigned to the subject: Social Sciences Department Coordinating teacher: SANCHEZ-CUENCA RODRIGUEZ, IGNACIO

Type: Compulsory ECTS Credits: 6.0

Year: 2 Semester: 1

Branch of knowledge: Social Sciences and Law

DESCRIPTION OF CONTENTS: PROGRAMME

- 1. Decisión theory: individual decision making under uncertainty
- 2. Non-cooperative static games, Nash equilibrium
- 3. Repeated games, folk theorems, and the emergence of reciprocity rules
- 4. Imperfect information games, signaling, reputational effects
- 5. Cooperative games, bargaining

ASSESSMENT SYSTEM

Students are expected to solve three problem sets individually, each of them carrying a 20% weight over the final grade.

There will be a final test (20%) and a term paper to be written in groups about applications of game theory to the social sciences (e.g. international relations, electoral competition, political regimes).

% end-of-term-examination:

% of continuous assessment (assigments, laboratory, practicals...):

BASIC BIBLIOGRAPHY

- Martin Osborne An Introduction to Game Theory, Oxford University Press, 2004
- Morrow, James Game Theory for Political Scientists, University of Michigan Press, 1994
- Ordeshook, Peter A Political Theory Primer, Routledge, 1992