

Academic Year: (2022 / 2023)

Review date: 29-04-2022

Department assigned to the subject: Social Sciences Department

Coordinating teacher: MEDINA SIERRA, LUIS FERNANDO

Type: Electives ECTS Credits : 6.0

Year : Semester :

DESCRIPTION OF CONTENTS: PROGRAMME

1. Introduction: The rational-choice paradigm in the social sciences. The use of deductive methods and the role of rationality.
2. Decision theory (I): Mathematical representation of individual preferences. The ¿median voter theorem¿ in questions of political competition.
3. Decision theory (II): Individual choice under uncertainty. Risk-aversion and expected utility.
4. Static, non-cooperative games (I): Common knowledge. The concept of strategic dominance.
5. Static games (II): Nash equilibrium.
6. Static games (III): Coordination failures and collective-action problems. The problem of multiplicity of equilibria.
7. Repeated games: ¿Folk theorems¿ and the emergence of norms of reciprocity and cooperation. Endogenous emergence of roles and institutions.
8. Theory of bargaining.
9. Games of imperfect information: Signaling games. Deterrence problems in situations of conflict (prevention and escalation).
10. Cooperative games: Criteria of resource allocation in groups.

% end-of-term-examination:	60
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% of continuous assessment (assignments, laboratory, practicals...):	40
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