Cooperation, collective action and formal models of strategy

Academic Year: (2020 / 2021) **Review date: 17-07-2020**

Department assigned to the subject: Social Sciences Department

Coordinating teacher: MEDINA SIERRA, LUIS FERNANDO

Type: Compulsory ECTS Credits : 6.0

Year : 2 Semester : 1

Branch of knowledge: Social Sciences and Law

OBJECTIVES

BASIC AND GENERAL COMPETENCES

BASIC COMPETENCES

CB1 Be able to show that they possess and comprehend facts and contents in an area of study which, based on a previous general secondary school level, have been extended to those included in advanced textbooks and in some aspects proceed from the most advanced studies in this area.

CB2 ¿Be able to show that they have learned how to apply their knowledge professionally to their future jobs or tasks and that they possess the competences needed to develop and defend arguments and solve problems in that area of study.

CB3 ¿ Be able to show that they are capable of collecting and interpreting the relevant data (normally within their area of study) needed for formulating judgments which require critical thought on social, scientific and ethical topics of relevance.

CB4 ¿ Be able to show that they are able to transmit information, ideas, problems and solutions both to specialized and non-specialized publics.

CB5 ¿ Be able to show that they have developed the learning skills required to perform further studies with a high degree of self-dependence.

GENERAL COMPETENCES

CG1 ¿ Understand social, political, legal and economic realities from a comparative perspective.

CG2 ¿ Be able to approximate and analyze the intrinsic values contained in equal opportunities, multi-cultural society, political ideological and cultural pluralism, human rights, and the international community.

CG5 ¿ Be able to debate and formulate critical reasoning, using precise terminology and specialized resources, when analyzing international and global phenomena, employing both the concepts and knowledge from different disciplines as well as the methods of analysis, paradigms and concepts pertaining to the Social Sciences.

OVERLAPPING COMPETENCES

CT1 ¿ Acquire the capacity to communicate knowledge in oral and written form, both to specialized and to non-specialized publics.

CT2 ¿ Acquire the capacity to establish good interpersonal communication and to work both in interdisciplinary and international teams.

CT3 ¿ Acquire the capacity to organize and plan workloads, taking correct decisions based on the available information, collecting and interpreting relevant data in order to provide assessments in that area of study.

CT4 ¿ Develop the motivation and capacity to perform independent continuous learning for life, with an endowment to adapt to change and new situations.

SPECIFIC COMPETENCES

CE1 ¿ Be familiar with the principal political and social theories. Be capable of analyzing and comparing contemporary policies.

CE2 ¿ Be familiar with and understand the processes of political, social, economic and cultural change in society and contemporary policy.

CE7 ¿ Understand the main dynamics which generate inequality and its consequences, and comprehend the principles on which equal opportunity policies are based.

CE12 ¿ Be able to formulate and solve basic economic, social, political problems in an international context.

CE16 ¿ Be able to carry out case studies and apply comparative method to analyze institutions, processes and policies in different countries.

LEARNING RESULTS
· Knowledge of formal models of strategic behaviour, basic notions of utility theory, games in normal and extensive form and models of negotiation and collective action.
· Understand how formal models can be used to analyse complex phenomena and know their main applications to collective action problems and cooperation, conflict, international crisis, dissuasion and market solutions.

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:	20
% of continuous assessment (assigments, laboratory, practicals…):	80

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