

ECP77043 — Game Theory

Module Information	
Module Code	ECP77043
Module Title	Game Theory
Department	Economics
Module Personnel	Sergio Ascencio
Academic Year	2026-2027
Credit Weighting	5 credits
Semester	Semester 1
Contact Hours	10 hours of lectures and 5 hours of tutorials

Module Content	
Module Description	Game theory is a powerful tool of economic analysis for situations in which agents behave interdependently. In these settings, agents anticipate how their decisions affect others and how others may respond. This module introduces the building blocks of game theory and the main equilibrium concepts used to analyse strategic interaction. These techniques are then applied to examples drawn from a range of economic settings. Topics covered include: 1. Strategic Form Games - Nash Equilibrium 2. Bayesian Games - Bayesian-Nash Equilibrium 3. Extensive Form Games - Subgame Perfect Equilibrium 4. Perfect Bayesian equilibrium, Sequential Equilibrium, and signalling.
Module Learning Aims	
Learning Outcomes	On successful completion of this module, students should be able to: - Describe models in game theory, especially as they relate to economics. - Use game theory models to analyse applied economic problems. - Derive economic insights from models in game theory.



Module Content

Indicative Reading / Resources

None

Assessment

Assessment Components

Final examination: 70%
Weekly problem sets: 30%

Assessment Details

Assessment for the module is based on a final examination accounting for 70% of the grade. In addition, students will submit weekly problem sets making up the remaining 30%

Additional Information

Prerequisites

None

Co-requisites

None

Any other information

None