
ECON. APPLICATIONS OF GAME THEORY in Fall 2020 (EC3061)

Course Code	EC3061	Professor(s)	Carla Canelas
Prerequisites	None	Office Number	G-206
Class Schedule	M: 10:50-12:25 in SD-3 R: 16:20-17:55 in SD-3	Office Hours	By appointment
Credits	4	Email	ccanelas@aup.edu
Semester	Fall 2020	Office Tel. Ext.	

Course Description

This course is an introduction to game theory. It presents some of the main models in the subject and illustrates how they can be used to understand different socio-economic and political phenomena. Topics covered include Nash equilibrium, mixed strategy equilibrium, extensive games with perfect information, coalitional games, repeated games, and Bayesian games.

Course Learning Outcomes

Understand the basic concept in game theory and the assumptions underlying these concepts
Analyse and solve different games and applications
Take real-world situations and describe them as simple games

General Education

Course Outline

Tentative outline subject to change.

TOPICS Introduction

READINGS Ch 1

TOPICS Nash Equilibrium: Theory

READINGS Ch 2

TOPICS Nash Equilibrium: Illustrations

READINGS Ch 3

TOPICS Mixed Strategy Equilibrium

READINGS Ch 4

Midterm Exam 1: Thursday, October 22, 2020

TOPICS Extensive Games with Perfect Information: Theory

READINGS Ch 5

TOPICS Extensive Games with Perfect Information: Illustrations

READINGS Ch 6

TOPICS Extensive Games with Perfect Information: Extensions and Discussion

READINGS Ch 7

Paper presentations: Thursday, November 5, 2020

Project presentations: Thursday, December 3, 2020

TOPICS Coalitional Games and the Core

READINGS Ch 8

TOPICS Bayesian Games- Imperfect Information

READINGS Ch 9

TOPICS Extensive Games with Imperfect Information

READINGS Ch 10

TOPICS Other topics: Repeated Games

READINGS Ch 14-15

Midterm Exam 2 (cumulative): Thursday, December 10, 2019

Project: Monday, December 21, 2020 - 20:00

Textbooks

Title	Author	Publisher	ISBN	Required
Introduction to Game Theory: International Edition	Martin J. Osborne	Oxford	9780195322484	No

Attendance Policy

Students studying at The American University of Paris are expected to attend ALL scheduled classes, and in case of absence, should contact their professors to explain the situation. It is the student's responsibility to be aware of any specific attendance policy that a faculty member might have set in the course syllabus. The French Department, for example, has its own attendance policy, and students are responsible for compliance. Academic Affairs will excuse an absence for students' participation in study trips related to their courses.

Covid-19 temporary amendments:

Students studying at The American University of Paris are still expected to attend ALL scheduled classes. Due to the Covid-19 pandemic, students will have the option of attending classes remotely when special circumstances apply. For example when students are placed under quarantine by the French authorities or by their doctor, or when students present symptoms of Covid-19 and are directed, by their doctor or the AUP Health Office, to remain home. It is still the student's responsibility to be aware of any specific attendance policy that their professor might have set in the course syllabus. In particular, Students attending remotely from distant Time Zones should check with their professors about the specific attendance policy for remote learners.

Attendance at all exams is mandatory.

In all cases of missed course meetings, the responsibility for communication with the professor, and for arranging to make up missed work, rests solely with the student.

Whether an absence is excused or not is ALWAYS up to the discretion of the professor or the department. Unexcused absences can result in a low or failing participation grade. In the case of excessive absences, it is up to the professor or the department to decide if the student will receive an "F" for the course. An instructor may also recommend that a student withdraw, if absences have made it impossible to continue in the course at a satisfactory level.

Students must be mindful of this policy when making their travel arrangements, and especially during the Drop/Add and Exam Periods.

Grading Policy

Midterm exam 1: 25 %

Midterm exam 2: 30 %

Paper: 20 %

Project: 25 %

Other
