COURSE DETAIL

GAME THEORY
Country China
Host Institution Fudan University
Program(s) Fudan University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Economics
UCEAP Course Number 148
UCEAP Course Suffix
UCEAP Official Title GAME THEORY
UCEAP Transcript Title GAME THEORY
UCEAP Quarter Units 4.50
UCEAP Semester Units 3.00

Course Description

Course objective:

1) The students should learn how to describe games in the formal language of game theory.
2) Students should also learn how to recognize the major strategic considerations and predict the behavior in games using the concepts of game theory.
3) At the end of the course the students should be able to analyze and solve complicated games

This subject is an elective course in management science. Game theory is the mathematical study of multi-person strategic interactions, in which an individual’s success depends on his/her own choice as well as the choices of others. Game theory has applications in many fields, such as politics, economics, biology, and computer science. The goal of this course is to give you a thorough introduction into game theory. The students should learn how to describe games in the formal language of game theory. Students should also learn how to recognize the major strategic considerations and predict the behavior in games using the concepts of game theory. At the end of the course the students should be able to analyze and solve complicated games. We will discuss four classes of games: static games of complete information, dynamic games of complete information, static games of incomplete information and dynamic games of incomplete information. Corresponding to these four classes of games will be four notions of equilibrium in games: Nash equilibrium, subgame-perfect Nash equilibrium, Bayesian Nash equilibrium and perfect Bayesian equilibrium. Furthermore, we’ll use many examples related to platform economy to illustrate the basic ideas in this course.

Language(s) of Instruction
English

Host Institution Course Number

MANA130343

Host Institution Course Title
GAME THEORY

Host Institution Course Details

Host Institution Campus

Host Institution Faculty
Huiqi Guan

Host Institution Degree

Host Institution Department
School of Management

Course Last Reviewed
2022-2023

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