

YEAR 3
Game Theory

1. MODULE SUMMARY

Aims and Summary

The aim of this course is to introduce basic concepts of game theory and its applications mainly to business.

Module Size and credits

ECTS points	5
Total student study hours	125
Number of weeks	12
School responsible	Lazarski University, Faculty of Economics and Management
Academic Year	2021/2022

Entry Requirements (pre-requisites and co-requisites)

Intermediate Microeconomics

Excluded Combinations

None

Composition of module mark (including weighting of components)

Final exam, 60%

Midterm, 40%

Pass requirements

To pass the course a student must score at least 40% of the overall weighted average and not less than 35% for each assessment component (i.e. coursework and final exam). Reassessment: coursework component and/or examination as appropriate.

Special Features

None

Course stages for which this module is mandatory

BA in Business Economics, year 3

Course stages for which this module is a core option

None

2. TEACHING, LEARNING AND ASSESSMENT

Intended Module Learning Outcomes

Upon completion of this course, students will be able to:

1. Employ the basic concepts and tools of game theory to everyday business and economic problems.
2. Analyse and solve games using game tree and pay-off matrix.
3. Appraise how businesses can avoid the prisoner's dilemma.
4. Employ and explain strategic moves.

Indicative Content

1. Basic ideas and terminology
2. Games with sequential moves, extended form of game
3. Games with simultaneous moves; discrete strategies
4. Games with simultaneous moves; continuous strategies
5. Mixed strategies
6. Prisoners' dilemma in repeated games
7. Strategic moves
8. Asymmetric information
9. Evolutionary games
10. Cooperative game theory

Teaching and Learning

This module will be taught by means of lectures, seminars and self-directed study. Formative Assessment: Each in-class exam will be solved and discussed during lecture. Tutorial guidance will be provided for exam. Student activity and time spent on each activity comprises:

Guided	0 hours	(0%)
Lecture	0 hours	(0%)
Self-guided	65 hours	(52%)

Seminar	60 hours	(48%)
Workshop	0 hours	(0%)
Total	125 hours	

Method of Assessment (normally assessed as follows)

Final exam, 60%, a comprehensive exam, will assess all learning outcomes

Coursework, 40%, will assess all learning outcomes.

Re-sit

Students failing any component of assessment, at the first attempt, are entitled to one re-sit attempt. This will be by new examination and/or new coursework scheduled for the next assessment opportunity. For coursework, if more than one element existed in the first attempt, this may be combined into one assessment for re-sit.

Date of last amendment

30-01-2017

3. MODULE RESOURCES

Essential Reading

A. Dixit, S. Skeath, 2014, *Games of Strategy*, 4th ed., W.W. Norton

Recommended Reading

A. Dixit, B. Nalebuff, 2010, *The Art of Strategy*, .W. Norton

Game Theory with Ben Polak, Open Yale courses:

<http://oyc.yale.edu/economics/econ159/lecture-1>

Required Equipment

None.

4. MODULE ORGANISATION

Module leader

Name Mgr. Iana Okhrimenko

E-mail iana.okhrimenko@lazariski.pl

Length and month of examination

120 minutes in January

Expected teaching timetable slots

No timetable information available.

Subject Quality and Approval information

Board of Study

Faculty Collaborative Provision Committee

Subject Assessment Board

Faculty Council, Faculty of Economics and Management

Shortened title

Date of approval by FCPC

13 Feb 2017