

Game Theory (Evening MBA) MGMT-GB.3323.10 Fall 2025

Syllabus Subject to Change

Professor Robert C. Seamans

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Office hours: By appointment

Teaching Fellow: TBD

READING

• HBS Cases & other material - required

- Selections from *The Art of Strategy (AoS)* (Dixit and Nalebuff) recommended
- Selections from *Co-opetition (Coop)* (Brandenburger and Nalebuff) recommended

COURSE OVERVIEW

This class uses a blend of cases, lectures and simulations to understand real world phenomena through the lens of game theory. For example, we use game theory to answer questions such as: (i) Why did it take so long for Los Angeles to get an NFL team? (ii) How was Netflix able to succeed where Blockbuster failed? (iii) Why did Kennedy respond the way he did in the Cuban Missile Crisis? The course will equip students with game theory techniques for making good business decisions by learning how to recognize and model strategic situations and to predict when and how actions will influence the decisions of others.

COURSE GRADING

Grading will be based on the following mix of individual and group work:

Participation	20% 20%	
Simulation		
Group Write up: Netflix	15%	
Group Write up: BSB-Sky	15%	
Group Project	30%	

Individual Work

Participation: You are required not only to attend classes, but also to carefully prepare for each class and contribute actively to class discussion. Your effort and contribution in class discussions will determine your participation grade. I will evaluate your remarks based on their relevance, accuracy and logical consistency. If you need to miss a class, please email me ahead of time to tell me you will be away and why. For your reference, Stern's policy on attendance is included below:

Attendance: Faculty will excuse absences and entertain requests to change exam and assignment due dates only in cases of documented serious illness, family emergency, religious observance, or civic obligation. If you will miss class for religious observance or civic obligation, you must inform your instructor no later than the first week of class. Recruiting activities, business trips, and vacation travel are not acceptable reasons for absences or requests to schedule exams and assignments.

Group Work

Group Project: Your group will research, write and present a short (5-page single space; 10-page double space; exhibits do not count towards the page limit) research paper that applies the tools we learn in class to a real-world issue. There will be three components to the Group Project. The first component is a one-page proposal due in Week 3. The second component is the research paper, due in Week 14. The third component is a presentation of the research project to your classmates, also in Week 14. The Group Project counts for 30% of your total grade.

Group Case Write-ups: Over the course of the semester, your group will do two case write-ups (2-page single space; 4-page double space; exhibits do not count towards the page limit). Instructions for each of these write-ups will be posted in Brightspace. Each write up counts for 15% of your total grade.

Simulation: Starting in about Week ,7 we will run a simulation over the course of several weeks, both in class and out of class. There are several components to the simulation including bidding on countries, quantity setting and short write ups on your strategy. More information on the simulation will be given in class. The Simulation counts for 20% of your total grade (10% will be the final write up and 10% will be your actual performance).

In-class Activities: There will be other in-class activities, including the "Game Theory in the News" presentations, which are performed as a group. These are not explicitly graded as group work, but can affect your individual participation grade. More importantly, they will help you engage with game theory concepts by applying them to topical issues.

Formatting

Formatting for all papers is as follows: single or double space, Times New Roman 12-point font, 1-inch margins all around. Please list names on the first page, alphabetical by last name.

Original Work

All of your work <u>must</u> be original. For case write ups, you should analyze the case you are given; this means you should not use material that is beyond the scope or time frame of the case. For the group project, all information used must be properly referenced. Failure to properly reference any external source constitutes plagiarism. To avoid any confusion over the originality of your work, your team should work alone, and should not utilize any analysis found on the web, performed for previous classes, or from any other source. Please contact me if you have any questions regarding these issues.

You are free to use ChatGPT, Claude or other LLM. These are useful tools for writing, much in the way that predictive typing and auto-correct are useful tools that help your writing. Please note however that ChatGPT, Claude and other LLMs are often "wrong" about topics and so you should carefully read through whatever you submit. You are responsible for what you turn in. If you turn in something wrong or factually incorrect, you will receive a lower grade.

COURSE COMMUNICATION

A NYU Brightspace website will be created for this course. You should check it on a regular basis. The course syllabus, class roster, lecture notes, case write-up instructions, and general course announcements and other information will be posted on the site.

OTHER ISSUES

Honor Code: Please remember that you are governed by the MBA Honor Code. Moreover, every student is obligated to report any suspected violation of that code.

Students with Disabilities: If you are having trouble in class, I want to know about it as soon as possible. I will do my best to help students who, despite a sincere and solid effort, are experiencing difficulty. If you have a qualified disability and will require academic accommodation during this course, please contact the Moses Center for Students with Disabilities (CSD, 998-4980) and provide me with a letter outlining recommended accommodations.

2024 COURSE SCHEDULE (This will give you an idea of the 2025 schedule)

Week	Date	Topic	Assignments Due For Class	Supplemental Reading For Class
1	17-Sep	Course Intro; Sequential & Simultaneous Games		AoS: pp.3-51; 64-77; 104-108; 120-124; Coop: pp. 59-64
2	24-Sep	Repeated Games; Auctions	Form groups	AoS: pp. 141-151; 154-159; 165-169; 301-325
3	1-Oct	Mixed Strategy; Calculus; Judo Strategy	1 paragraph project proposal	
4	8-Oct	HBS Netflix Case; Beliefs	2-4 page write up on Netflix case	
5	15-Oct	Signaling & Screening; discus OPEC	Read "Pirational Choice"	AoS: pp. 247-259
6	22-Oct	Opec Simulation Begins	1-2 page write-up of team bids for each OPEC market	
7	29-Oct	HBS Case BSB-Sky; War of Attrition	2-4 page write up on BSB vs. Sky case	
8	5-Nov	***NO CLASSES***		
9	12-Nov	HBS Case Holland Sweetener	Read Holland Sweetener A case and "The Right Game"	
10	19-Nov	HBS Case Xbox, Added Value, Positioning	Read Xbox case	Coop: pp. 11-39; 110-117; 198-211
11	26-Nov	Brinkmanship & Bargaining	Read Cuban Missile Crisis chapter	
12	3-Dec	Opec Simulation Wrap Up & Loose Ends	2-4 page OPEC summary	
13	10-Dec	Group Project Presentations	Group Project write up and presentation slides	