

Part I (due at the beginning of class Friday, October 24, 2025)

Read the syllabus and write down your questions about it. Then read Chapter 1: The Nature of Games in the textbook and answer the reading questions below.

Remember that what you turn in for Part I should have 3 parts, as mentioned in the syllabus:

- (a) Your responses to the reading questions below.
- (b) Your own questions/comments on the reading.
- (c) The amount of time you spent on Part I (including the time spent reading).

You are welcome to type or handwrite Part I.

Reading Questions

The first question is from syllabus reading; the next three are from the textbook reading.

1. Write down your questions from the syllabus.
2. Give at least two examples of things that fit the definition of game on the first page of the chapter (examples you come up with—not just things from the chapter). Explain for each of your examples who the players are, what a strategy looks like, what an outcome looks like, and what the payoffs look like (note that pride is the payoff in tic-tac-toe and variations ☺).
3. Make your own example of a zero-sum matrix game like Game 1.1 and create the movement diagram for your game. Your game should have at least 2 rows and 3 columns or 2 columns and 3 rows and it should have a different movement diagram than the one for Game 1.1.
4. Which of the applications mentioned in the chapter sound the most intriguing to you and what about that/those application(s) is/are intriguing?

Part II: Exercises (prepare for class Friday, October 24, 2025)

1. In the following partially-played tic-tac-toe game, which of the players, if either, has the advantage? If someone has the advantage, how should that player proceed in order to win the game? If no one has an advantage, explain why not and how the game could be played out to a tie.

X		O
	O	
		X

2. In the following partially-played tic-tac-toe game, where should O play next? How will the game proceed from there? Explain.

X		
O		
		X

3. For the following partially-played tic-tac-toe game, which moves is O hoping X will make next? Explain why, including what will happen as the games play out in those cases.

X		
O		

Part III: Homework Problems (due Wednesday, October 29 at the beginning of class)

No Part III problems yet.

Portfolio Assignment (turn in a hard copy in class Friday, October 24, 2025)

You'll turn in a hard copy of this so that I know you've done it already, but type it so that you have the electronic version to add to your portfolio at the end of the semester.

Write a paragraph or two (or longer if you have more to say) to answer this question: What do you hope to learn in Game Theory this half semester?