## Choice, Commerce, and Conflict: An Introduction to PPE

TTh 10:30-11:50am Professor Ryan Doody

## Course Syllabus PHIL 0555 Choice, Commerce, and Conflict: An Introduction to PPE

Fall 2021 TTh 10:30-11:50am

**Instructor:** Ryan Doody **Location:** Sayles Hall 204 **Office hours:** TTh 12-1pm

Course Website: <a href="mailto:canvas.brown.edu/courses/1086415">canvas.brown.edu/courses/1086415</a>

Email: ryan doody@brown.edu

#### **Grading Breakdown**

Reading Responses ... 15% Homework & Quizzes ... 15% Midterm Exam ... 25% Final Exam ... 35% Participation ... 10%

#### Schedule for Choice, Commerce, and Conflict Fall 2021

Week 1: Introductions and Prisoners Dilemmas

**September 9** - First Day of Class

No Reading

Week 2: A Primer on Game Theory, I

**September 14** - Hobbes and the State of Nature Excerpts from Thomas Hobbes' *Leviathan* 

**September 16** - Thinking Strategically I: Dominance and Common Knowledge Excerpts from Ken Binmore's *Game Theory: A Very Short Introduction* (p. 17-21, 158-159, 168-170)

Watch Wi-Phi Video on Prisoner's Dilemma with Geoff Sayre-McCord

Reading Response #1 Due

#### Week 3: A Primer on Game Theory, II

**September 21** - Thinking Strategically II: Nash Equilibria Osborne, *An Introduction to Game Theory*, 2.1-2.7

September 23 - Thinking Strategically III: Nash Equilibria, Part 2 Cristina Bicchieri, "Rationality and Game Theory" in *The Oxford Handbook of Rationality* 

Reading Response #2 Due

#### Week 4: Property, Part I

**September 28** - Property in the State of Nature and Property as Convention Review excerpt from Thomas Hobbes' *Leviathan* David Hume's "Of Justice and Property"

**September 30** - Property as Natural Right John Locke's "Of Property"

Reading Response #3 Due

#### Week 7: Markets, Prices, and Information

October 19 - Price as a Signal & the Invisible Hand Friedrich Hayek, "The Use of Knowledge in Society" Play <u>The Parable of the Polygons</u> RECOMMENDED: Edna Ullman-Margalit, "Invisible-Hand Explanations"

October 21 - The Ethics of Price Gouging Matt Zwolinski, "The Ethics of Price Gouging" "Price Gouging in Emergencies", Rationally Speaking Podcast

> Reading Response #6 Due Midterm Exam is Released

#### Week 5: Property, Part II

October 5 - Property as a Problem

Karl Marx's "Primitive Accumulation", "The Communist Manifesto"

October 7 - Tragedy of the Commons

David Schmidtz "Institution of Property"

Play The Evolution of Trust Activity

RECOMMENDED:

Excerpt from Ken Binmore's Playing for Real ("Tragedy of the Commons")

Elinor Ostrom "Collective Action and the Evolution of Social Norms"

Reading Response #4 Due

#### Week 6: Markets, Division of Labor, and Alienation

October 12 - The Division of Labor

Adam Smith's "Of the Division of Labor" (from The Wealth of Nations)

October 14 - Alienation and Bullshit Jobs

Excerpts from Marx's Economic and Philosophical Manuscripts (1844)

Excerpt from Smith's Wealth of Nations, Book V, Article II

David Graeber's "On the Phenomenon of Bullshit Jobs: A Work Rant"

Reading Response #5 Due

#### Week 8: Exchange and Efficiency

October 26 - The Fundamental Theorems of Welfare Economics Allan Gibbard, "What's Morally Special About Free Exchange?" Debra Satz, "Market and Nonmarket Allocation"

October 28 - Ethical Limits of the Market

Debra Satz, chapter 4, Why Some Things Should Not Be for Sale: The

Moral Limits of the Market

Jason Brennan and Peter Jaworski, chapters 1-2, Markets Without Limits

Reading Response #7 Due Midterm Exam is Due

#### Week 9: Market Failures

November 2 - Public Goods and Externalities Tyler Cowen, "Public Goods" Excerpts from David Friedman, "Market Failures"

November 4 - Healthcare Economics

Kenneth Arrow, "Uncertainty and the Welfare Economics of Medical Care" (948-54, 961-2)

Reading Response #8 Due

#### Week 10: Economic Justice I

November 9 - Piketty and Economic Inequality
Watch Capital in the Twenty-First Century - a film by Justin Pemberton
PECOMMENIDED:

Thomas Piketty, "Introduction" from Capital in the Twenty-First Century

**November 11** - Rawls, Justice as Fairness, and Equal Opportunity Excerpts from John Rawls' A Theory of Justice

Reading Response #9 Due

#### Week 11: Economic Justice II

November 16 - Nozick's Entitlement Theory of Justice Excerpts from Robert Nozick's Anarchy, State, and Ultopia RECOMMENDED:

 ${\it G.A. Cohen, "Robert Nozick and Wilt Chamberlain: How Patterns Preserve Liberty"}$ 

#### November 18 - Utilitarianism

Excerpt from Jeremy Bentham's Principles of Morals and Legislation Excerpt from J.S. Mill's Utilitarianism

Reading Response #10 Due

# **Game Theory**

Introduction

#### Week 12: Introduction to Public Choice Theory

November 23 - Politics for Economists

Excerpts from Anthony Downs' An Economic Theory of Democracy

#### THANKSGIVING BREAK

#### Week 13: Public Choice, II

November 30 - The (Ir)rationality of Politics Michael Huemer, "Why People Are Irrational about Politics" C. Thi Nguyen, "Escape the Echo Chamber"

December 2 - Should You Vote?

Geoffrey Brennan and Loren Lomasky, "Is There a Duty to Vote?"

Reading Response #11 Due

#### Week 14: Paternalism

December 7 - UBI, Poverty, and Paternalism Freakonomics "Is the World Ready for a Guaranteed Basic Income?" Esther Duflo, "Human Values and the Fight Against Poverty"

December 9 - Should Medicine Be Regulated?

Jessica Flanigan, interview on her book Pharmaceutical Freedom: Why Patients Have a Right to Self Medicate

#### **Grade Game**

Your activity grade will be determined in the following way:

You will be paired with one of your classmates at random.

- ➤ If you ask for an A and they do too, you will get a B.
- ➤ If you ask for an A and they ask for a B, you will get an A+.
- ➤ If you ask for a B and they do too, you will get a B+.
- ➤ If you ask for a B and they ask for an A, you will get a B-.

[Zoom Poll]

Represent the decision with a table

What should you do?

Them

You 
$$\begin{array}{c|ccc} & \mathbf{A} & \mathbf{B} \\ \mathbf{A} & B & A^+ \\ \mathbf{B} & B^- & B^+ \end{array}$$

### **Grade Game**

How do you value the outcomes?

(What are the game's payoffs?)

$$A^+ > B^+ > B > B^-$$

#### **Grade Game**

How do you value the outcomes?

(What are the game's *payoffs*?)

$$A^+ > B^+ > B > B^-$$
  
2 1 0 -1

### **Grade Game**

Plug your payoffs into the table

You 
$$\begin{array}{c|cc}
 & Them \\
 & A & B \\
\hline
 & B & 0 & 2 \\
\hline
 & B & -1 & 1
\end{array}$$

Grade Game

What if they ask for an A? What should you do?

Them

A
B
You
A
0
2
B
-1
1

Grade Game

What if they ask for an A? What should you do?

Them

A
B

You

A
D
2

B -11

Grade Game

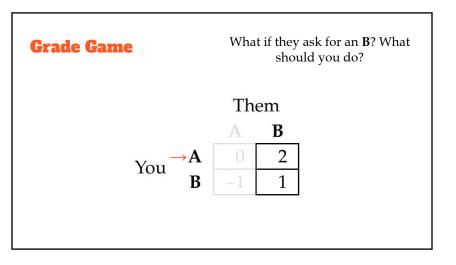
What if they ask for an B? What should you do?

Them

A B

You
A 0 2

B -1 1



So, either way...

Them

 $\begin{array}{c|cccc}
\mathbf{A} & \mathbf{B} \\
\mathbf{A} & \mathbf{B} \\
\mathbf{B} & -1 & 1
\end{array}$ 

**Grade Game** 

Them

 $\begin{array}{c|cccc}
\mathbf{A} & \mathbf{B} \\
\mathbf{You} & \mathbf{A} & \mathbf{0} & \mathbf{2} \\
\mathbf{B} & -1 & 1
\end{array}$ 

Conclusion: You should ask for an A rather than for a B.

### **Grade Game**

Your partner has either asked for an **A** or a **B**.

Conclusion: You should ask for an A rather than for a B.

### **Grade Game**

Your partner has either asked for an A or a B.

If they asked for an **A**, then you should too.

Conclusion: You should ask for an A rather than for a B.

Your partner has either asked for an **A** or a **B**.

If they asked for an **A**, then you should too.

If they asked for a B, then you should ask for an A.

Conclusion: You should ask for an A rather than for a B.

#### **Grade Game**

Your partner has either asked for an **A** or a **B**.

If they asked for an **A**, then you should too.

If they asked for a **B**, then you should ask for an **A**.

Either way, you should ask for an A rather than for a B.

Therefore...

Conclusion: You should ask for an **A** rather than for a **B**.

#### **Grade Game**

Your partner has either asked for an **A** or a **B**.

If the lor an A, then you should too.

If they asked then you should ask for an A.

Either way, you skot. C. sl. T. a. A rather than for a **B**.

Therefore...

Conclusion: You should ask for an Arabar than for a **B**.

(Strict) Dominance

### (Strict) Dominance

One strategy (e.g., "ask for an A") *strictly dominates* another (e.g., "ask for a B") just in case the payoff from the former is greater than the payoff of the latter no matter what the other players choose.

### (Strict) Dominance

One strategy (e.g., "ask for an **A**") *strictly dominates* another (e.g., "ask for a **B**") just in case the payoff from the former is greater than the payoff of the latter **no matter what the other players choose.** 

### (Strict) Dominance

"Ask for an A" strictly dominates "ask for a B".

"Ask for a B" is strictly dominated.

#### Life Lesson:

Do not play dominated strategies.

(Is this a descriptive or a normative question?)

What should happen?

Them

You  $\begin{array}{c|cc} \mathbf{A} & \mathbf{B} \\ \mathbf{A} & B & A^+ \\ \mathbf{B} & B^- & B^+ \end{array}$ 

### **Grade Game**

What should happen?

Them

B

You A

**A** B

 $\begin{array}{c|cccc}
B, B & A^+, B^- \\
\hline
B^-, A^+ & B^+, B^+
\end{array}$ 

 $\mathbf{A}$ 

### **Grade Game**

What should happen?

Them

You

### **Grade Game**

What should happen?

Them

A 0

**B** 2. −1

You A B

-1,2 1,3

If you each choose rationally, you'll both ask for an **A** and end up getting Bs (0).

Them

ou **→A** 

**A** ← **B** 0,0 2,-1

#### **Grade Game**

Had you each asked for a **B** instead though, you both would've received a B+ (1).

Them

B

You A B

 $\begin{array}{c|ccccc} A & 0,0 & 2,-1 \\ B & -1,2 & 1,1 \end{array}$ 

#### **Grade Game**

You (both) prefer getting a B+ to getting a B.

Them

You

**A B A 0,0 2,-1 B -1,2 1,1** 

#### **Grade Game**

You (both) prefer getting a B+ to getting a B.

Them

You  $\begin{array}{c|cccc} & & A & B \\ \hline A & 0,0 & 2,-1 \\ B & -1,2 & 1,1 \end{array}$ 

The outcome in which you each ask for an **A** is *Pareto-dominated* by the outcome in which you each ask for a **B**.

### (Strict) Pareto-Dominance

One outcome *strictly Pareto-dominates* another just in case everyone prefers the former to the latter.

### (Strict) Pareto-Dominance

One outcome *strictly Pareto-dominates* another just in case everyone prefers the former to the latter.

The outcome <**B**> strictly Pareto-dominantes the outcome <**A**>.

The outcome <**A**, **A**> is *Pareto-dominated*.

#### **Life Lesson**:

Sometimes, acting rationally can result in a bad outcome.

### **Life Lesson**:

Sometimes, acting rationally can result in a bad outcome.

Example: The Prisoner's Dilemma

Example: The Prisoner's Dilemma

Can you think of any real-life examples?

You  $\begin{array}{c|cc} & & & Them \\ & A & B \\ \hline & A & 0,0 & 2,-1 \\ & B & -1,2 & 1,1 \\ \end{array}$ 

Example: The Prisoner's Dilemma

Can you think of any real-life examples?

What are some ways we could avoid Prisoner's Dilemmas?

Can you think of any real-life examples?

What are some ways we could avoid Prisoner's Dilemmas?

(...Would we want to?)

What are some ways we could avoid Prisoner's Dilemmas?



#### **Grade Game**

*Must* this be a Prisoner's Dilemma?

You  $\begin{bmatrix} \mathbf{A} & \mathbf{B} \\ \mathbf{A} & \mathbf{B} \end{bmatrix}$   $\begin{bmatrix} \mathbf{A} & B, B & A^+, B^- \\ \mathbf{B} & B^-, A^+ & B^+, B^+ \end{bmatrix}$ 

How else might you value the outcomes?

### **Grade Game**

*Must* this be a Prisoner's Dilemma? No.

You 
$$\begin{array}{c|cccc} \mathbf{A} & \mathbf{B} \\ \mathbf{B} & B, B & A^+, B^- \\ \mathbf{B} & B^-, A^+ & B^+, B^+ \end{array}$$

How else might you value the outcomes?

#### **Grade Game**

*Must* this be a Prisoner's Dilemma? No.

# Them

You 
$$\begin{array}{c|cccc} & \mathbf{A} & \mathbf{B} \\ \hline \mathbf{B} & B, B & Guilt! \\ \hline \mathbf{B}^-, A^+ & B^+, B^+ \end{array}$$

How else might you value the outcomes?

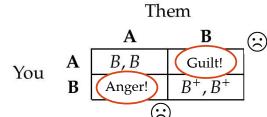
*Must* this be a Prisoner's Dilemma? No.

You A B Guilt! B B Guilt!

How else might you value the outcomes?

#### **Grade Game**

*Must* this be a Prisoner's Dilemma? No.



How else might you value the outcomes?

### **Life Lesson**:

Often, what it's rational for you to do depends on what you care about.

### **Life Lesson**:

Often, what it's rational for you to do depends on what you care about.

The *payoffs* matter.

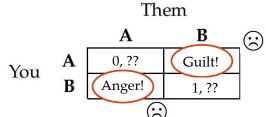
*Must* this be a Prisoner's Dilemma? No.

You  $\begin{array}{c|c} & \text{Them} \\ & A & B \\ \hline & B, B & \text{Guilt!} \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & \\ & & & \\$ 

How else might you value the outcomes?

#### **Grade Game**

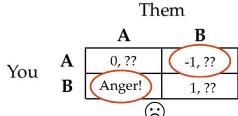
*Must* this be a Prisoner's Dilemma? No.



How else might you value the outcomes?

#### **Grade Game**

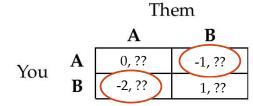
*Must* this be a Prisoner's Dilemma? No.



How else might you value the outcomes?

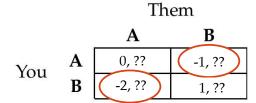
#### **Grade Game**

*Must* this be a Prisoner's Dilemma? No.



How else might you value the outcomes?

What should you do in this case?



#### **Grade Game**

What should you do in this case?

Them Do you have a dominant strategy? A B 0,?? -1, ?? You -2, ?? 1, ??

### **Grade Game**

What should you do in this case?

Do you have a dominant strategy?

No.

A 0,?? You -2, ??

Them

В

-1, ??

1, ??

It depends on what your classmate does!

### **Grade Game**

What should you do in this case?

Do you have a dominant strategy?

Them

В

No.

0,?? You

-1, ?? -2, ?? 1, ??

 $\mathbf{A}$ 

It depends on what your classmate does!

What will your classmate do?

What should you do in this case?

Them

You A 0,?? (-1,??)
B (-2,??) 1,??

It depends on what your classmate does!

#### Life Lesson:

Sometimes, what it's rational for you to do depends on what *others* care about.

### Life Lesson:

Sometimes, what it's rational for you to do depends on what *others* care about.

Think: "What might they do?"

#### **Grade Game**

What will your classmate do?

What should you do in this case?

Them

You A 0,?? (-1,??)
B (-2,??) 1,??

It depends on what your classmate does!

Suppose they only care about the grade they will receive.

What should you do in this case?

Them

You  $\begin{array}{c|cccc} & A & B \\ \hline A & 0,?? & -1,?? \\ \hline B & -2,?? & 1,?? \\ \end{array}$ 

It depends on what your classmate does!

#### **Grade Game**

Suppose they only care about the grade they will receive.

What should you do in this case?

Them

You A

 $\begin{array}{c|cccc}
 & A & B \\
 & 0,0 & -1,-1 \\
 & -2,2 & 1,1 \\
\end{array}$ 

It depends on what your classmate does!

#### **Grade Game**

Suppose they only care about the grade they will receive.

What should you do in this case?

Them

You

A B
0, 0 -1, -1
-2, 2 1, 1

Can you figure out what they would choose?

#### **Grade Game**

Suppose they only care about the grade they will receive.

What should you do in this case?

Them

You

 A
 B

 A
 0
 -1

 B
 2
 1

Can you figure out what they would choose?

Suppose they only care about the grade they will receive.

В

What should you do in this case?

Them

 $\mathbf{A}$ 0 -1

Can you figure out what they would choose?

You

#### **Grade Game**

Suppose they only care about the grade they will receive.

В

-1

What should you do in this case?

Them

 $A \stackrel{\smile}{\leftarrow}$ 0

Can you figure out what they would choose?

You

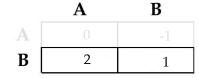
#### **Grade Game**

Suppose they only care about the grade they will receive.

What should you do in this case?

Them

You



Can you figure out what they would choose?

#### **Grade Game**

Suppose they only care about the grade they will receive.

What should you do in this case?

Them

 $\mathbf{A} \leftarrow$ 

В

You

B

2 1

Can you figure out what they would choose?

Suppose they only care about the grade they will receive.

What should you do in this case?

Them

You A 0 -1
B 2 1

For them, asking for an **A** strictly dominates. So, they will ask for an **A**.

#### **Grade Game**

Suppose they only care about the grade they will receive.

What should **you** do in this case?

You  $A 
\downarrow B$   $A \downarrow B$   $A \downarrow B$   $B 
\downarrow -2, 2 \qquad 1.1$ 

For them, asking for an **A** strictly dominates. So, they will ask for an **A**.

#### **Grade Game**

Suppose they only care about the grade they will receive.

What should you do in this case?

Them

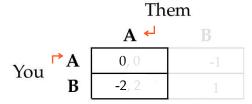
You A 0,0 -1
-2,2 1

For them, asking for an **A** strictly dominates. So, they will ask for an **A**.

#### **Grade Game**

Suppose they only care about the grade they will receive.

What should you do in this case?



If they ask for an **A**, you should too.

Suppose they (like you) would feel guilt/anger?

Them

You A 0,0 -1,??
B -2,?? 1,1

Can you figure out what they would choose?

**Grade Game** 

Suppose they (like you) would feel guilt/anger?

Them

You A 0, 0 -1, -2
B -2, -1 1, 1

Can you figure out what they would choose?

#### **Grade Game**

Them

You A 0,0 -1,-2 B -2,-1 1,1

Think about it.

#### **Grade Game**

If you ask for an **A**, what should they do?

Them

You A 0, 0 -1, -2
B -2, -1 1, 1

Think about it.

If you ask for an **A**, what should they do?

If you ask for a **B**, what should they do?

You A B

A B
0, 0 -1, -2
-2, -1 1, 1

Them

Think about it.

**Grade Game** 

(This is now a *coordination* game.)

What they will do depends on what they think you will do.

Them

You A
B

A B

0,0 -1,-2

-2,-1 1,1

What you should do depends on what you think they will do.

#### **The Number Game**

#### **The Number Game**

Choose a number between 1 and 100.

The number that is closest to two-thirds of the average wins the prize.

Good luck!