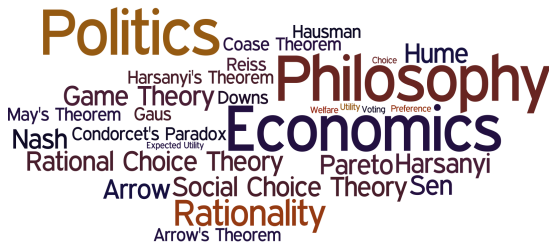


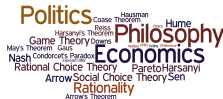
PHIL309P

Methods in Philosophy, Politics and Economics

Eric Pacuit
University of Maryland
pacuit.org



Practicalities

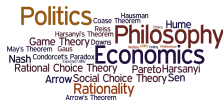


- ▶ Course website

<https://myelms.umd.edu/courses/1269219>

- ▶ Weekly readings will be posted
 - ▶ Slides will be posted
 - ▶ Announcements (canceled classes, etc.)
 - ▶ Links to assignments (online quizzes, problem sets)
- ▶ Web: pacuit.org
- ▶ Email: epacuit@umd.edu
- ▶ Office: Skinner 1103A

Practicalities: Grading



1. Participation (40%): in-class quizzes, online discussion.

Practicalities: Grading



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3. Problem sets (15%): Answers must be typed and submitted via ELMS.
4. Final exam (15%): The final exam will be given in-class during exam week (**December 11 - 17**).

[illegible]

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Practicalities: Online Discussion



- ▶ Ask questions about the lectures and/or readings, discuss quizzes, discuss problem sets.
- ▶ You will receive online discussion grades (out of 10 points) periodically throughout the semester (the final online discussion grade may be worth more than 10 points). The score is based on your activity on piazza (questions asked, questions answered, notes posted).

Practicalities: In-Class Discussion



- ▶ There will be short in-class quizzes given during lectures.
- ▶ We will use the tools at tophat.com to facilitate asking questions during the semester. Please sign up for an account on tophat.com (you only need a tophat account not a tophat account + textbook).

The join code for this course is: **781517**

Practicalities: In-Class Discussion



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- ▶ Each question will be worth 1 point (usually 0.5 for participation and 0.5 for correct answer). **There are no make-ups for missed in-class quizzes.** The lowest 5% of the number of quizzes will be dropped.

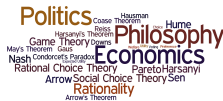
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Practicalities: Math



Many students struggle with the mathematical content of the course. The course is completely self-contained, but it does require that you become comfortable with some mathematical notation.

Practicalities: Math



- ▶ Spend some time familiarizing yourself with the relevant mathematical notation: sets $X = \{a, b, c\}$, subset $X \subseteq Y$, element of $x \in X$, cross-product $X \times Y = \{(x, y) \mid x \in X, y \in Y\}$, functions $F : X \rightarrow Y, \dots$
- ▶ Ask questions, especially about notation that you do not understand (no matter how trivial).
- ▶ The quizzes are designed, in part, to make sure you understand the mathematical content
- ▶ It is important to use the proper notation on the problem sets and final exam (otherwise I won't understand your answer).

Economic models consist of clearly stated assumptions and behavioral mechanisms. As such, they lend themselves to the language of mathematics. Flip the pages of any academic journal in economics and you will encounter a nearly endless stream of equations and Greek symbols...

Economic models consist of clearly stated assumptions and behavioral mechanisms. As such, they lend themselves to the language of mathematics. Flip the pages of any academic journal in economics and you will encounter a nearly endless stream of equations and Greek symbols...The reason economists use mathematics is typically misunderstood. It has little to do with sophistication, complexity, or a claim to higher truth. Math essentially plays two roles in economics, neither of which is cause for glory: clarity and consistency. (Rodrik, pgs. 22-23)

D. Rodrik. *Economic Rules: The Rights and Wrongs fo the Dismal Science*. W.W. Norton, 2015.

Advice



- ▶ Attend lectures regularly (attendance is required after all!)
- ▶ Put your devices (laptop, tablet, phone) away during lectures (unless you need it to take notes), but please do not check Facebook, Instagram, Youtube, etc.
- ▶ Keep up with the readings
- ▶ Come to lectures ready to discuss the material for the week
- ▶ Ask questions (even seemingly trivial questions can spark a very interesting debate)
- ▶ For the problem sets: You will be graded on the correctness of your answer *and* on how well you convey your answer to the reader. Both aspects are important.

Topics



1. Rationality in Economics
2. Rational Choice Theory: Preference, Choice and Utility
3. Game Theory
4. Voting and Social Choice Theory
5. Interpersonal Comparisons of Utility

What is this course about?

1. Foundational *assumptions* in Economics and Political Science

There is one other set of accomplices—the economists who provide the arguments that those in the financial markets found so convenient and self-serving. The economists provided models—based on unrealistic assumptions of perfect information, perfect competition, and perfect markets—in which regulation was unnecessary. (Stiglitz, 333-4)

J. Stiglitz. *The Anatomy of a Murder: Who Killed the American Economy*. Critical Review: 21(2-3), pp. 329 - 339 (2009).

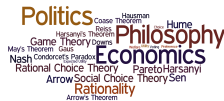
(Rodrik, 11)

D. Rodrik. *Economic Rules: Why Economics Works, When it Fails and How to Tell the Difference*. Oxford University Press, 2015.

What is this course about?

1. Foundational *assumptions* in Economics and Political Science
2. “Rational choice” explanations of social phenomena

The Aim of Economics



The main task of the social sciences is to explain social phenomena. It is not the only task, but it is the most important one, to which others are subordinated or on which they depend. (Elster, pg. 9)

J. Elster. *Explaining Social Behavior: More Nuts and Bolts for the Social Sciences*. Cambridge University Press, 2007.

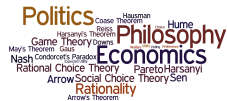
What is this course about?

1. Foundational *assumptions* in Economics and Political Science
2. “Rational choice” explanations of social phenomena
3. What does it mean (for an individual/group) to be *rational* (or *reasonable*) as opposed to *irrational* (or *unreasonable*)?



Three glasses are shown side-by-side. The first is a red wine glass filled with red wine. The second is a beer glass filled with beer and a head of foam. The third is a tall glass filled with a yellow beverage, ice, and lemon slices, garnished with a sprig of rosemary.

Simple Choice Model



Rational Choice?



Simple Choice Model

Rational Choice?



Preference



>



>



Simple Choice Model

Rational Choice



Preference



>



>



Simple Choice Model

Irrational Choice



Preference



- **Option uncertainty:** What type of wine is it? Is the red wine sweet or dry? Is the white wine spoiled? Is the lemonade very sugary? ...

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[Options vs. **Prospects**]

- ▶ **Option uncertainty:** What type of wine is it? Is the red wine sweet or dry? Is the white wine spoiled? Is the lemonade very sugary? ...

[Options vs. **Prospects**]

- ▶ **Menu uncertainty:** Are there other drink choices that are available (e.g., a beer or a soda)? ...

- ▶ **Option uncertainty:** What type of wine is it? Is the red wine sweet or dry? Is the white wine spoiled? Is the lemonade very sugary? ...

[Options vs. **Prospects**]

- ▶ **Menu uncertainty:** Are there other drink choices that are available (e.g., a beer or a soda)? ...
- ▶ **Context:** What are we having to eat? What time of day is it? How many drinks have you had? Are you driving home? ...

Decision Problems



Decision Problems

Individual decision-making (**against nature**)

- E.g., Gambling

Politics
Coase Theorem
Hausman
Hume
Philosophy
Game Theory
Harsanyi's Theorem
Nash
May's Theorem
Condorcet's Paradox
Rational Choice Theory
Arrow's Theorem
Pareto
Harsanyi
Theory
Sen
Rationality
Social Choice
Arrow's Theorem



Decision Problems



Individual decision-making (**against nature**)

- ▶ E.g., Gambling

Individual decision making in **interaction**

- ▶ E.g., Playing chess



- E.g., Gambling

- E.g., Playing chess

- ▶ E.g., Carrying a piano



- E.g., Gambling

- E.g., Playing chess

- ▶ E.g., Carrying a piano
- ▶ E.g., Voting in an election

