

# PHIL. 4800: Economics, Game Theory, Rational Choice

Fall, 2009

Class Meets: TR 12:30 - 1:45, Hellems 263  
Professor: Michael Huemer  
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Web page: <http://spot.colorado.edu/~huemer/>

Office Hours: TR 1:50 - 3:25  
Hellems 266

## What Is This Course About?

This course is about interesting issues in the theory of rational choice, including game theory and economics. The course will have 4 units, addressing the following sorts of questions:

*First unit:* Rational Choice, single-person contexts. How should we make choices when faced with uncertainty about possible outcomes? If you prefer A to B and B to C, must you prefer A to C? What happens when there are infinitely many alternatives, or infinitely many possible outcomes of a choice?

*Second unit:* Game Theory. How should we make choices in interactions with other people, when the other people's choices affect our own gains or losses? When is it to our advantage to cooperate with others? When is it to our advantage to try to exploit others?

*Third unit:* Economics & Distributive Justice. What determines the value of an economic good? Is our economy "exploitative"? Should there be a minimum wage? Should we pay people to cover their basic needs, regardless of how much they produce? Who really carries the burden of taxes?

*Fourth unit:* Economics, Further Issues. How realistic are the assumptions of modern economics? What social responsibility, if any, do businessmen have? Can economics be used to predict the behavior of government? Why are voters ignorant and irrational?

The common thread is *the nature and consequences of instrumental rationality*. We start by looking at what it is for a solitary individual to be instrumentally rational, then move on to consider how one acts rationally in interactions involving several people (game theory), and then move on to broader social consequences of this way of acting (economics).

## Text

The required readings will be available in pdf format on a CD, which you can get from the professor for \$1.

## Who Should Take This Course?

There's only one good reason to take this course. That is because you want to learn more about the nature and consequences of rational decision-making. If you don't care about that, don't take the course.

*Warnings and requests:* Don't take the course if you are unable to regularly make it *on time*. Be forewarned that the objective nature of my exams means that if you don't do the readings and come to class, you will bomb the tests. Lastly, if you love political correctness, if you need someone to pump up your self-esteem, or if you think there's no truth and all beliefs are equally good, then you shouldn't take a course from me.

The benefit of the course is that you will come to better understand why human society works

the way it does (for instance, why we have “rights”) ... and possibly even learn to choose more rationally.

### Other Guidelines

1. To contact me: send email to the address listed above, and I will probably respond the same day. Or call between 10 a.m. and 10 p.m. Leave a message, since I screen my calls.
2. Come to my office to talk about philosophy and society, or play chess. I will try to answer any questions you have, but you needn't have a specific question to come.
3. During class, do not hesitate to comment on or ask about anything we discuss. Feel free to express any idea (that has to do with philosophy). Do not be afraid to contradict something that's been said, and do not be afraid of asking a stupid question. It is from debate and asking “stupid” questions that you will learn most.
4. The course web page, <<http://spot.colorado.edu/~huemer/>>, includes information about the course, including this syllabus and course lecture notes. There is also some philosophical entertainment.

### Course Requirements & Grading

#### • **Unit Tests (65% of final grade):**

There will be four tests. See schedule below for dates. The tests will be 20 questions, multiple choice & short answer, objective questions about what was said in the readings and in class.

#### • **Short Papers (25%):**

There are 3 writing assignments, described below.

#### • **Participation (10%):**

This is based on the professor's subjective sense of how well you contributed to class discussion and how regularly you attended class.

*Note about grades:* Grades are based on observable performance, rather than effort or virtue. Please do not ask for a higher grade because you tried really hard, or because you really need it. Also, do not obsess about your grade. After you graduate, no one will ever look at your grades again. You should come here to increase your understanding, not to get a grade.

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## Writing Assignments

### General Guidelines

- < *Length:* Minimum of 3 complete pages. Do not manipulate margins, font size, etc., to make it look longer.
- < *Due Dates:* are written on the schedule below. Keep track of them; don't expect me to remind you.
- < *Late papers:* Will lose 10% credit (one letter grade). ; Papers more than a week late won't be accepted at all! ; ;
- < *If you can't come to class:* You may send it by email. Must be *received before 10 a.m.* on the due date. Acceptable formats: rtf, txt, pdf, or pasted into an email message. *If you send something I can't read, your paper will be late!*
- < *Grading:* You will lose points if your paper is late, too short, doesn't do what the assignment asks,

or does not evidence understanding of the material that it's about.

< *Writing Guide*: I have posted a guide to writing at <<http://spot.colorado.edu/~huemer/writing.htm>>. If you want your papers to be good, read that. All papers should conform to paragraph **29** in the guide.

< *Plagiarism*: Don't give me something written by someone else. If you use ideas or information from someone else, cite the source. If you use someone else's words, they must be in quotation marks or set off, and the source must be cited. If you plagiarize a paper, you'll get an F in the *entire course*, and be reported to the dean. ; ; ; If you are unsure what plagiarism is, see <<http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml>>

< *Topic*: See descriptions below.

### Assignment #1

Come up with a real-life situation that illustrates a “game” of the sort discussed in the unit on Game Theory. This could be a situation that happened to you, a generic situation that happens in the larger society, or a situation anywhere else. (For instance, maybe you have been in a prisoner's dilemma with your roommate. Or maybe the President plays an ultimatum game with another leader. Etc.) Your paper should:

- a. Explain the real-life situation, including who the “players” are, what the available alternatives are, and what the payoffs are.
- b. Explain what “game” it is like—explain the game, and how your situation is like that game.
- c. Analyze what each person rationally should do in the situation.
- d. Also report what each person did or usually does in the situation.

Your example should be one that was *not* specifically discussed in this course.

### Assignment #2

Same as assignment #1, but pick a different situation and a different game.

### Assignment #3

Pick some flawed institution, system, or rule that we have in our society, and come up with a way to improve upon it. Your paper should

- a. Clearly explain the institution and what is wrong with it.
- b. Explain how it could be modified/replaced to achieve better results.
- c. *Important*: Identify some specific principle or principles from rational choice theory, game theory, or economics that explain why your change would produce better results.

Your example should be one that was *not* specifically discussed in this course.

## Schedule

This shows what you should read for the class discussion on each day. Also note the **test dates** and **due dates**. All readings are indicated by the author's last name. Some days have *more than one* assigned reading. Also, some reading assignments are only *part* of the article (see page/section #s indicated).

T, Aug 25	Introduction, course requirements. Thoughts about rationality.	
<b>Unit 1 Rational Choice: Single-Person Problems</b>		
R, Aug 27	Rational choice	Tversky & Kahneman, "Rational Choice ...", sections 1-4.
T, Sept 1	Pascal's Wager	Pascal, <i>Pensées</i>
R, Sept 3	Transitivity	Quinn, "Puzzle of the Self-Torturer"
T, Sept 8	Transitivity	Rachels, "Counterexamples ..." Huemer, "Dominance Argument ..."
R, Sept 10	Newcomb's Problem	Nozick, "Newcomb's Problem ..."
T, Sept 15	Banker paradox	Barrett & Arntzenius, "An Infinite Decision Puzzle"
R, Sept 17	St. Petersburg Paradox	Clark, <i>Paradoxes from A to Z</i> Cowen & High, "Time, Bounded Utility ..."
T, Sept 22	<b>Test #1</b>	
<b>Unit 2 Game Theory</b>		
R, Sept 24	Prisoner's Dilemmas	Dawkins, "Nice Guys Finish First"
T, Sept 29	Nash Equilibria	Dutta, "Nash Equilibrium"
R, Oct 1	Bargaining Theory	Barry, <i>Theories of Justice</i> , pp. 10-30
T, Oct 6	Bilateral Monopoly & Ultimatum Game	Davis & Holt, <i>Experimental Economics</i> , 5.4 Friedman, Ch. 11, section on "Bilateral Monopoly ..."
R, Oct 8	Game Theory and Rights <b>Due: Paper #1</b>	Friedman, "A Positive Account ..."
T, Oct 13	Commons & Public Goods	Hardin, "Tragedy of the Commons" Schmidtz, "Institution ...", 204-7
R, Oct 15	<b>Test #2</b>	
<b>Unit 3 Economics &amp; Distributive Justice</b>		
T, Oct 20	Exploitation	Marx, "Wage Labour ..."
R, Oct 22	Modern Price Theory	Huemer, "The Theory of Economic Value"
T, Oct 27	Minimum Wage	Wilkinson, "The Ethics and Economics ..."

R, Oct 29	Welfare <b>Due: Paper #2</b>	Van Parijs, "Why Surfers Should be Fed ..."
T, Nov 3	Proportional Taxation	Fried, "Proportionate Taxation ..."
R, Nov 5	Taxation	Nozick, "The Entitlement Theory" Friedman, "Who Pays Taxes?"
T, Nov 10	<b>Test #3</b>	
<b>Unit 4 Economics: Further Issues</b>		
R, Nov 12	Philosophical Foundations	Sen, "Rational Fools ..."
T, Nov 17	Economic Realism	Friedman, "The Methodology of Positive ..."
R, Nov 19	Interpersonal Utility Comparison <b>Due: Paper #3</b>	Hausman, "The Impossibility ..." (1995) <i>Optional:</i> Weintraub, "Impossibility ..." (1996), Hausman, "The Impossibility ..." (1997)
T, Nov 24	<i>No Class - Fall Break</i>	
R, Nov 26	<i>No Class - Fall Break</i>	
T, Dec 1	Business Ethics	Friedman, "The Social Responsibility ..." Mackey, et al., "Rethinking the Social ..."
R, Dec 3	Public Choice Theory	Friedman, <i>Machinery of Freedom</i> , ch. 7, 39
T, Dec 8	Economists vs. the Public	Caplan, "Economists versus the Public ..."
R, Dec 10	Irrationality	Caplan, "Rational Ignorance" & "Rational Irrationality"
W, Dec 16 1:30 pm	<b>Test #4</b>	

