PHIL 444: Groups and Choices

Winter 2024

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Course Description

This course has four units.

Group Attitudes We'll look at how groups act, whether groups have beliefs, and what it takes for those beliefs to be reasonable, and how to combine individual attitudes into a group attitude.

Voting We'll look at voting systems that are used around the world, and some theoretical results about the limits of voting systems.

Games and Coordination We'll introduce the basics of game theory, with a focus on (a) coordination games, and (b) how well empirical evidence matches up to the theoretical predictions that game theory makes.

Information Networks We'll look at some famous games involving transmission or suppression of information, and link this to contemporary work on optimal information networks.

Canvas

There is a Canvas site for this course, which can be accessed from https://canvas.umich.edu. Course documents (syllabus, lecture notes, assignments) will be available from this site. Please make sure that you can access this site. Consult the site regularly for announcements, including changes to the course schedule. And there are many tools on the site to communicate with each other, and with me.

Required Materials

There is a textbook for the course, which is available for free online.

- *Game Theory* by Giacomo Bonanno, available at http://faculty.econ.ucdavis.edu/faculty/bonanno/GT_Book.html.

The other readings will all be available through the university library, and will be linked on Canvas.

Course Requirements

1. Do the readings! Nothing I say in class will be more important than the reading.
2. Come to lectures, and engage. This class will use **iClicker**, and you have to get a working iClicker early in term. Later in term, we will be doing several games in class to test how well theoretical predictions match up with behavior. Even though it's a big lecture hall, you are **encouraged** to ask questions during lecture. I do not want to be lecturing for 80 minutes.
3. Participate in the discussion sections. It is really important that you interact with the discussion section leader. Some of this material is hard, and you can only grasp it by talking it through in small groups. Some of the material doesn't look hard, but like learning a foreign language, you only figure out what you're missing when you try to put it into practice.
4. Write short papers (about 4 pages, or about 1200 words) on each of the first two units of the course.
5. Complete 5 of the 6 weekly assignments from parts 3 and 4 of the course. (You should complete all six, but only the best five will count for credit - this is to allow you to drop one if there is some emergency one week. If the future resembles the recent past.)
6. Do the final exam, which will be fairly short, and held in the exam period.

Both of the papers may be co-written with one other student in the class. But you may not co-author both papers with the same other student.

Summary of Grading System

1. Two papers - 20% each, 40% total.
2. Weekly assignments - 6% each, 5 assignments (that count), 30% total
3. Participation in lecture (including performance in games) - 10%
4. Final Exam - 20%

Plagiarism

Although team-work, and even co-authorship, is encouraged, plagiarism is strictly prohibited. You are responsible for making sure that none of your work is plagiarized. Be sure to cite work that you use, both direct quotations and paraphrased ideas. Any citation method that is tolerably clear is permitted, but if you'd like a good description of a citation scheme that works well in philosophy, look at https://www.mendeley.com/guides/apa-citation-guide/.

You are encouraged to discuss the course material, including assignments, with your classmates, but all written work that you hand in under your own name must be your own. If work is handed is as the work of two people, you are affirming that each person did a fair share of the work. (Note that when you're submitting work on Canvas, you have to each submit the paper, even if it is co-authored. That way Canvas knows that everyone has turned in work.)

You should also be familiar with the academic integrity policies of the College of Literature, Science & the Arts at the University of Michigan, which are available here: https://lsa.umich.edu/lsa/academics/academic-integrity.html. Violations of these policies will be reported to the Office of the Assistant Dean for Student Academic Affairs, and sanctioned with a course grade of F.

Collaboration

As noted above, you are allowed to collaborate with other people in the class. It's a class on group action; we want to encourage group activity! And in any case, I don't think outside of academia writing long things by yourself is that important a skill. But there are still a few constraints on this.

1. You must describe (ideally in footnotes to the document) what ways you collaborated with others.
2. If you submit co-authored essays, then you should submit a separate document setting out what contribution each person made. This doesn't have to be long; a paragraph is fine. And there are a lot of ways to divide up the work that are reasonable. In particular, you can divide things up by parts (e.g., I wrote the first two pages, my collaborator wrote the other two), or by temporal stages (e.g., I wrote the first draft, my collaborator wrote the final draft). But we want you to say, on your own, what the division was.
3. You can only co-write papers with other people who have the same GSI; otherwise it complicates the grading too much.
4. You cannot have the same co-author for each of the two papers.

Citations Policy

We don't have a standard format for citations; any format will do. But you do need to cite things. In particular, whenever you say that an author says something, we want you to cite **the page** they say it on. This can either be in a footnote, or just writing the page number in brackets in the text. This is for three reasons.

1. It's good practice to record this kind of detail. Academic papers are long, and just saying that something is said somewhere in a paper isn't that helpful.
2. It could be useful for you if we think that the author did not in fact say the thing you are attributing to them. One thing that happens in courses like this is that students find something where an author says something somewhat different on page 12 to what they said on page 4. If we've primarily remembered the view on page 4, you might be entirely right in what you attribute to them, even if it differs from our memory.
3. Finally, a more 2024 reason. LLMs are really bad at this kind of granular citation. So this kind of detail is pretty convincing evidence that you're turning in your own work.

Generative AI Policy

For this course, we don't have a blanket ban on using generative AI, like UMichGPT. In theory, these tools could be useful editors, or proof-readers, and I don't feel comfortable ruling out those usage. But there are three important constraints on using generative AI if you do use it. If I was in your position, complying with these constraints would be more trouble than it's worth, and I would rather simply write my own papers. But if you would use them, these are the constraints.

First, it must comply with the following constraints (which are based on the "Permitted Depending on Activity Type" model on https://genai.umich.edu/guidance/faculty/course-policies.)

The use of generative AI tools (e.g. ChatGPT, Dall-e, etc.) is permitted in this course for the following activities:

- Brainstorming and refining your ideas;
- Checking grammar and style.

The use of generative AI tools is not permitted in this course for the following activities:

- Impersonating you in classroom contexts.
- Doing your part of collaborative work.
- Writing a draft of a writing assignment.
- Writing entire sentences, paragraphs or papers to complete class assignments.

Second, note that you've used any of these tools. Note which tool you used (ChatGPT, UMGPT, editing software, etc.) and what you used it for.

Third, keep records of what prompts you entered. This is very important if there is a suspicion that you've crossed the line from using it for checking for grammar and style to getting it to write whole sentences. (Automated checkers couldn't tell between these uses even if they worked, which in any case they don't. But keeping a record of your pre-AI text, and of your prompt, does show the difference.)

Fourth, include citations, even if they got wiped out by the generative AI tools.

The basic principle I have here is that no one would get in trouble for using the spelling or grammar checkers in word processing software, and if you're using generative AI as updated spelling or grammar checkers, I don't think you should get in trouble for this. (Though do note that not everyone agrees - do not take this as a licence for using them in other classes.) But there's no skill in just copying the essay prompt into a chat window and copying the answer into a paper.

Finally, note that we have actually copied the essay questions into one prominent chatbot, and the answers it gave were often completely wrong. In one case it confused which authors had which view, in another it just made up arguments that had nothing to do with the papers under discussion. Maybe things will change in the near or far future, but for now the tools give the same confident answer whether they have accurately summarised a source document, or they are just making stuff up. They are like that friend who knows a bunch of things, but thinks they know a lot more than they actually do. And trusting such a friend is risky.

Disability

The University of Michigan abides by the Americans with Disabilities Act of 1990, Section 504 of the Rehabilitation Act of 1973, and other applicable federal and state laws that prohibit discrimination on the basis of disability, which mandate that reasonable accommodations be provided for qualified students with disabilities.

If you have a disability, and may require some type of instructional and/or examination accommodation, please contact me early in the semester. If you have not already done so, you will also need to register with the Office of Services for Students with Disabilities. The office is located at G664 Haven Hall.

For more information on disability services at the University of Michigan, go to http://ssd.umich.edu.

Class Schedule

Group Attitudes

Thursday, January 11

Topic Introduction
Reading No New Reading

Tuesday, January 16

Topic Group Action
Reading Margaret Gilbert, Walking Together: A Paradigmatic Social Phenomenon

Thursday, January 18

Topic Group Action
Reading Michael Bratman, Shared Cooperative Activity
Recommended Reading Michael Bratman, Shared Intention

Tuesday, January 23

Topic Group Belief
Reading Jennifer Lackey, What is Justified Group Belief? (The important sections to read are 1, 4-7, and 9. The paper is very long, and reading those sections should be plenty.)

Thursday, January 25

No class; I'm away at a conference

Tuesday, January 30

Topic Group Justification
Reading Jessica Brown, Group belief and direction of fit

Thursday, February 01

Topic Merging Probabilities
Reading Jeffrey Sanford Russell, John Hawthorne and Lara Buchak, Groupthink

Voting

Tuesday, February 06 and Thursday, February 08

Topic Voting systems
Reading Simon Hix, Ron Johnston, and Iain McLean Choosing an Electoral System

Tuesday, February 13 and Thursday, February 15

Topic Arrow's Theorem
Reading Michael Morreau, Arrow's Theorem
Recommended Reading John Geanakoplos, Three Brief Proofs of Arrow's Impossibility Theorem

Tuesday, February 20 and Thursday, February 22

Topic Sen on Social Choice
Reading Amartya Sen, The Impossibility of a Paretian Liberal
Amartya Sen, The Possibility of Social Choice
Recommended Reading Christian List, Social Choice Theory

Tuesday, February 27 and Thursday, February 29

Winter Break

Games and Coordination

Note that in this unit, and this unit **only** it would be better to do the reading **after** we discuss the material in class.

Tuesday, March 05 and Thursday, March 07

Topic Prisoner's Dilemma
Reading Bonanno, §2.1 and 2.2
Robert Axelrod, More Effective Choice in the Prisoner's Dilemma
Recommended Robert Axelrod, Effective Choice in the Prisoner's Dilemma
Robert Axelrod and William Hamilton, The Evolution of Cooperation (possibly the most cited humanities/social science article ever written)
Robert Axelrod, The Emergence of Cooperation among Egoists
Steven Kuhn, Prisoner's Dilemma
Interaction From this time on we'll be making heavy use of the experimental setups on Veconlab, and it is very important that you have your account set up by then.

Tuesday, March 12

Topic Iterated Deletion
Reading Bonanno, §2.5 and 2.6

Thursday, March 14

Topic Backward Induction
Reading Bonanno, §3.1 and 3.2

Tuesday, March 19

Topic Stag Hunt
Reading Brian Skyrms, Stag Hunt

Thursday, March 21

Topic Coordination and Risk
Reading Kaushik Basu, The Traveler's Dilemma: Paradoxes of Rationality in Game Theory

Tuesday, March 26

Topic Focal Points
Reading Judith Mehta, Chris Starmerand Robert Sugden, The Nature of Salience: An Experimental Investigation of Pure Coordination Games

Thursday, March 28

Topic Limits to Induction
Reading Rosemarie Nagel, Unraveling in Guessing Games: An Experimental Study

Information Networks

Tuesday, April 02

Topic Introducing Signaling Games
Reading In-Koo Cho and David Kreps, Signaling Games and Stable Equilibria, §2

Thursday, April 04

Topic The Market for Lemons
Reading George Akerlof, The Market for "Lemons": Quality Uncertainty and the Market Mechanism

Tuesday, April 09

Topic Job Market Signaling
Reading Michael Spence, Job Market Signaling, §§1-4

Thursday, April 11

Topic Information Cascades
Reading (read after class) Lisa Anderson and Charles Holt, Information Cascades in the Laboratory

Tuesday, April 16

Topic Epistemic Networks
Reading Cailin O'Connor and Sanford Goldberg, Social Epistemology, §4.3

Thursday, April 18

Topic Misleading with Truth
Reading James Owen Weatherall, Cailin O'Connor, and Justin Bruner, How to Beat Science and Influence People: Policymakers and Propaganda in Epistemic Networks

Full List of Papers

- George Akerlof, The Market for "Lemons": Quality Uncertainty and the Market Mechanism
- Lisa Anderson and Charles Holt, Information Cascades in the Laboratory
- Robert Axelrod, More Effective Choice in the Prisoner's Dilemma
- Robert Axelrod, Effective Choice in the Prisoner's Dilemma
- Robert Axelrod and William Hamilton, The Evolution of Cooperation
- Robert Axelrod, The Emergence of Cooperation among Egoists
- Kaushik Basu, The Traveler's Dilemma: Paradoxes of Rationality in Game Theory
- Michael Bratman, Shared Intention
- Michael Bratman, Shared Cooperative Activity
- Jessica Brown, Group belief and direction of fit
- John Geanakoplos, Three Brief Proofs of Arrow's Impossibility Theorem
- Margaret Gilbert, Walking Together: A Paradigmatic Social Phenomenon
- In-Koo Cho and David Kreps, Signaling Games and Stable Equilibria
- Simon Hix, Ron Johnston, and Iain McLean Choosing an Electoral System
- Steven Kuhn, Prisoner's Dilemma
- Jennifer Lackey, What is Justified Group Belief?
- Christian List, Social Choice Theory
- Judith Mehta, Chris Starmerand Robert Sugden, The Nature of Salience: An Experimental Investigation of Pure Coordination Games
- Michael Morreau, Arrow's Theorem
- Rosemarie Nagel, Unraveling in Guessing Games: An Experimental Study
- Cailin O'Connor and Sanford Goldberg, Social Epistemology
- Jeffrey Sanford Russell, John Hawthorne and Lara Buchak, Groupthink
- Amartya Sen, The Impossibility of a Paretian Liberal
- Amartya Sen, The Possibility of Social Choice
- Brian Skyrms, Stag Hunt
- Michael Spence, Job Market Signaling
- James Owen Weatherall, Cailin O'Connor, and Justin Bruner, How to Beat Science and Influence People: Policymakers and Propaganda in Epistemic Networks