# PHIL 444: Groups and Choices

# Winter 2024

# Brian Weatherson

Lead Instructor: Brian Weatherson

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Office Hours: TBC

#### **Discussion Section Leades:**

- Walla Mohamedali
- Brandon Swinney

# **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.e du. 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**

- I. 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**

- I. 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 <a href="https://www.mendeley.com/guides/apa-citation-guide/">https://www.mendeley.com/guides/apa-citation-guide/</a>.

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: <a href="https://lsa.umich.edu/lsa/academics/academic-integrity.html">https://lsa.umich.edu/lsa/academic-integrity.html</a>. 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.

# **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 o6 and Thursday, February o8

**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 o5 and Thursday, March o7

**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