PHIL 808K: New Perspectives on Social Choice Theory

Instructor:	Eric Pacuit (pacuit.org)
Semester:	Fall 2022
Email:	epacuit@umd.edu
Course Website:	`https://umd.instructure.com/courses/1331026`
Office:	Skinner 1103A
Office Hours:	TBA
Class Times:	Wednesdays, 4:30pm - 7:00pm
Class Location:	SKN 1116

Course Description

In this seminar, we will discuss axiomatic theories of social choice, including a discussion of voting methods and voting paradoxes. We will focus on recent work presenting alternative models of group decision making using lotteries, and in which voters can "grade" candidates or delegate their votes. The topics that will be discussed this semester include:

- Classic results of social choice theory: Arrow's Theorem and its descendants; May's Theorem and other characterizations of majority rule; Voting paradoxes;
- Weakening Arrow's IIA condition;
- Lottocracy, probabilistic social choice, and sortition;
- Evaluative voting;
- Proxy voting and liquid democracy; and
- Deliberation and aggregation.

No previous familiarity with social choice or voting theory will be assumed.

If you are taking the seminar for credit, you will need to do the following: (1) Before each session, submit a question or comment about the readings for the week or the material discussed in the previous lecture. (2) Submit a short paper (roughly 8-10 pages) on a topic related to something we discussed this semester. The paper does not need to be technical. (3) Meet with me by Week 12 of the semester to discuss your final paper.

Schedule

The following is a tentative schedule for the course (this may change based on the interests of the students or if we need to spend more time on a particular topic). Some of the readings contain a lot of mathematics (especially the economics paper). I will explain the proofs when it is useful, otherwise we will focus on understanding the philosophical implications of the mathematical results.

Week 1 (8/31) Background: The social choice model

Topics: Arrow's Theorem and related results; voting methods; voting paradoxes; quantitative analyses

Reading (after the seminar):

⋆ M. Penn (2015), Arrow's Theorem and its descendants, Handbook of Social Choice and Voting.
- M. Morreau (2019), Arrow's Theorem, Stanford Encyclopedia of Philosophy, plato.stanford.edu/entries/arrows-theorem/.
- EP (2019), Voting Methods, Stanford Encyclopedia of Philosophy, plato.stanford.edu/entries/voting-methods/.

Week 2 (9/7) Majority rule

Topics: Arguments for majority rule; May's theorem and related results

Reading:

⋆ M. Risse (2004), Arguing for Majority Rule, Journal of Political Philosophy, 12:1, pp. 41 - 64.
⋆ J. Elster (2014), Tyranny and brutality of the majority, in *Majority Decisions: Principles and Practices*, pp. 159 - 176.
- P. Dasgupta and E. Maskin (2008), On the robustness of majority rule, Journal of the European Economic Association, 6(5), pp. 949 - 973.
- G. Woeginger (2003), A new characterization of the majority rule, Economics Letters 81, pp. 89 - 94.

Week 3 (9/14) Evaluating the Independence of Irrelevant Alternatives Condition

Reading:

⋆ W. Holliday and EP (2021), Appendix B, Axioms for defeat in democratic elections, Journal of Theoretical Politics, 33:4, pp. 475-524.
⋆ S. Ingham (2019), Why Arrow's theorem matters for political theory even if preference cycles never occur, Public Choice, 179, pp. 97 - 111.
⋆ M. Fleurbaey (2007), Social Choice and Just Institutions: New Perspectives, Economics and Philosophy, 23, pp. 15 - 43.
– E. Maskin (2021), Arrow's Theorem, May's Axioms, and Borda's Rule, manuscript.

Week 4 (9/21) Resolving cycles

Topics: Coherent IIA, Split Cycle and Stable Voting

Reading:

- ⋆ W. Holliday and EP (2022), Stable Voting, manuscript.
- ⋆ W. Holliday and EP (2022), Split Cycle: A New Condorcet Consistent Voting Method Independent of Clones and Immune to Spoilers, forthcoming in Public Choice.
- ⋆ W. Holliday and EP (2021), Section 4.3, Axioms for defeat in democratic elections, Journal of Theoretical Politics, 33:4, pp. 475-524.
- – W. Holliday and M. Kelley (2021), Escaping Arrow's Theorem: The Advantage-Standard Model, forthcoming in Economics and Philosophy.

Week 5 (9/28) Probabilistic Social Choice

Topics: Probabilistic social choice functions, random dictators, and maximal lotteries

Reading:

- ⋆ F. Brandt (2017). Rolling the dice: Recent results in probabilistic social choice. In U. Endriss, editor, Trends in Computational Social Choice, chapter 1, pp. 3 - 26.
- – F. Brandl, F. Brandt, and H. G. Seedig (2016), Consistent probabilistic social choice. Econometrica, 84(5), pp. 1839 - 1880.

Week 6 (10/5) Using lotteries to choose representatives, I

Reading:

- ⋆ A. Guerrero (2014), Against elections: The lottocratic alternative, Philosophy & Public Affairs, 42:2, pp. 135 - 178.

Week 7 (10/12) Using lotteries to choose representatives, II

Reading:

- ⋆ F. Engelstad (1989). The assignment of political office by lot, Social Science Information, pp. 23 - 50.
- ⋆ B. Flanigan, P. Gölz, A. Gupta, B. Hennig, and A. Procaccia (2021), Fair algorithms for selecting citizens' assemblies, Nature.

Week 8 (10/19) Evaluative voting

Reading:

- ⋆ M. Balinski and R. Laraki (2010), Chapter 4: Electing versus Ranking in the Traditional Model, pp. 67 - 92 and Chapter 6: Fallacies of the Traditional Model in Voting, pp. 111 - 128 from *Majority Judgement: Measuring, Ranking and Electing*.
- – M. Pivato (2014), Formal utilitarianism and range voting, Mathematical Social Sciences, 6:1, pp. 50 - 56.

Week 9 (10/26) Quadratic voting

Reading:

- ⋆ E. Posner and E. G. Weyl (2014), Voting Squared: Quadratic Voting in Democratic Politics, Coase-Sandor Institute for Law & Economics Working Paper No. 657.
- ⋆ B. Laurence and I. Sher (2017), Ethical considerations on quadratic voting, Public Choice, 172, pp. 195 - 222.

Week 10 (11/2) Weighted voting

Reading:

- ⋆ M. Pivato and A. Soh (2020), Weighted representative democracy, Journal of Mathematical Economics, 88, pp. 55 - 63.
- ⋆ A. Casella (2005), Storable votes, Games and Economic Behavior, pp. 391 - 419.
- – P. Harrenstein, M.-L. Lackner, and M. Lackner (2020), A Mathematical Analysis of an Election System Proposed by Gottlob Frege, Erkenntnis.

Week 11 (11/9) Proxy voting and liquid democracy

Reading:

- ⋆ C. Blum and C. Zuber (2016), Liquid Democracy: Potentials, Problems, and Perspectives, The Journal of Political Philosophy, 24, pp. 162-182.
- ⋆ J. Green-Armytage (2014), Direct Voting and Proxy Voting, Constitutional Political Economy.
- – C. Valsangiacomo (2020), Clarifying and Defining the Concept of Liquid Democracy, Swiss Political Science Review.
- – M. Brill, T. Delemazure, A.-M. George, M. Lackner, U. Schmidt-Kraepelin (2022), Liquid Democracy with Ranked Delegations

Week 12 (11/16) Deliberation and aggregation

Reading:

- ⋆ C. List (2018), Democratic Deliberation and Social Choice: A Review, Oxford Handbook of Deliberative Democracy.
- ⋆ J. Perote-Pena and A. Piggins (2015), A Model of Deliberative and Aggregative Democracy, Economics and Philosophy, 31(1), pp. 93-121.
- – S. Rafee Rad and O. Roy (2021), Deliberation, Single-Peakedness, and Coherent Aggregation, American Political Science Review 115:2, pp. 629-648.

Week 13 (11/23) No Class (Thanksgiving Break)

Week 14 (11/30) TBA

Topics: Topics for the last two classes will be announced later in the semester and will depend on student interest.

Week 15 (12/7) TBA

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