GOV 355M: Human Behavior as Rational Action
Spring 2012 (Unique Number: 38710)

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Office Hours: MW 3:30-5:00 & By Appointment

Writing Flag

This course carries the Writing Flag. Writing Flag courses are designed to give students experience with writing in an academic discipline. In this class, you can expect to write regularly during the semester, complete substantial writing projects, and receive feedback from your instructor to help you improve your writing. You will also have the opportunity to revise one or more assignments, and to read and discuss your peers' work. You should therefore expect a substantial portion of your grade to come from your written work.

Course Objectives and Overview:

The term "rational action" as used in the economic approach is generally equated with maximizing behavior. Individual human agents are assumed to have consistent and stable preferences over alternatives each of which is assigned some "utility." Maximization entails choosing the course of action that yields the highest expected utility. One is rational to the extent one uses the best means to achieve one's goals.

In this course we will learn a variety of social and political models based on such a notion of *individual rationality* and to investigate its *collective consequences*. In particular, we will find through the "Prisoner's Dilemma," the "Tragedy of the Commons," and the "Free-Rider Problem" a contrast between *rational man* and *irrational society*. Self-serving behavior of individuals does not usually lead to collectively satisfactory results.

So this course is about the stories of the Prisoners, the Herdsmen, and the Free-Riders. As a matter of fact, we will show that the Dilemma, the Tragedy, and the Problem share essentially the same mathematical structure, and hence they are essentially the same story - a story about human destiny. We will then explore the ways by which we might be able to escape such a destiny.

<u>The Prisoner's Dilemma: To C, Or Not To C?</u>

This is the story of the Prisoners as told by Dennis Chong: "Two apprehended suspects to a serious crime are detained incommunicado and faced with the following choice: each has been given the opportunity to turn state's witness for the purpose of convicting the other; if one prisoner agrees to confess while the other keeps silent, the confessor will get off scot-free while the other prisoner will be convicted and sentenced to ten years in prison. If neither prisoner confesses, both will escape prosecution for the serious crime, but will nevertheless be prosecuted and convicted for a minor crime that carries a one-year prison term. Finally - and herein lies the dilemma - if both prisoners elect to confess to the authorities, both will end up being convicted for the crime, although they will receive a slightly reduced sentence (e.g., five years) for having cooperated with the police." (Dennis Chong, *Collective Action and the Civil Rights Movement*, p. 6)

The Classical Prisoner's Dilemma		Suspect 2	
		Stay Mum	Confess
Suspect 1	Stay Mum	(1, 1)	(10, 0)
	Confess	(0,10)	(5, 5)

The question is, of course, to C, or not to C?

<u>The Tragedy of the Commons: the Remorseless Working of Things</u>

Here is the story as told by Garrett Hardin: Picture a pasture open to all. It is to be expected that each herdsman will try to keep as many cattle as possible on the commons. Such an arrangement may work reasonably satisfactorily for centuries because tribal wars, poaching, and disease keep the numbers of both man and beast well below the carrying capacity of the land. Finally, however, comes the day of reckoning, that is, the day when the long-desired goal of social stability becomes a reality. At this point, the inherent logic of the commons remorselessly generates tragedy.

Required Textbooks:

1. Thomas C. Schelling (1978), *Micromotives and Macrobehavior* (Norton).
2. Robert Axelrod (1984), *The Evolution of Cooperation* (Basic Books).
3. Dennis Chong (1991), *Collective Action and the Civil Rights Movement* (Chicago).
4. Elinor Ostrom (1990), *Governing the Commons* (Cambridge).
5. Howard Rheingold (2002), *Smart Mobs: The Next Social Revolution* (Basic Books)

The readings include journal articles and book chapters that are not in the required texts but are available online. The following are the internet sites at which you can search for these readings:

* Blackboard <https://courses.utexas.edu/webapps/login/>
* JSTOR <http://www.jstor.org/>
* UT Libraries <http://www.lib.utexas.edu/ >

Course Requirements and Grading:

Warning: This course requires analytical skills, including mathematics, logical deduction, tabulating & diagraming, and mastery of abstract concepts.

1. First Paper (6-8 pages): A case of the two-person, one-shot prisoner's dilemma (25%).
2. Second Paper (7-9 pages): a case of the two-person, iterated prisoner's dilemma (25%).
3. Third Paper (8-10 pages): a case of collective action or n-person prisoner's dilemma (30%).
4. Presentation (6-10 min): one of your papers (10%).
5. Attendance & Participation (10%)

Detailed paper assignments will be posted on the "Assignment" section of Blackboard. The first paper is due on February 17, the second on March 23, and the third on May 4. Presentations will be held during Weeks 14-16.

Regular class attendance is required. If you miss a class without permission, one-fifth (1/5) of the 10% total grade allocated for attendance will be deducted. Penalty will be doubled during the presentation weeks. * Plus/minus grades will be assigned for the final grade.

Students with Disabilities:

Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities, 471-6259. For more information, visit http://www.utexas.edu/diversity/ddce/ssd/.

University Honor Code:

The core values of the University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the University is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community.

Unauthorized collaboration and plagiarism are strictly prohibited. For definitions and examples of unauthorized collaboration and plagiarism, visit
http://deanofstudents.utexas.edu/sjs/acint_student.php

Accommodations for Religious Holidays:

By UT Austin policy, you must notify me of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you must miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, you will be given an opportunity to complete the missed work within a reasonable time after the absence.

Emergency Evacuation Policy:

Occupants of buildings on The University of Texas at Austin campus are required to evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.

Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building.

Students requiring assistance in evacuation shall inform their instructor in writing during the first week of class.

In the event of an evacuation, follow the instruction of faculty or class instructors.

Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.

Behavior Concerns Advice Line (BCAL): 232-5050
Emergency Information Web Site: http://www.utexas.edu/emergency

Course Outline and Assignments: ('#' indicates articles that are available online.)

Week 1: Introduction

R. Hanley, "In Plea Deal, Youth Promises to Testify about Baby's Death." *The New York Times*, March 10, 1998. [UT Libraries]
L. Grossman, "Simon Pulsifier: The Duke of Data." *Time*, December 25, 2006 [Blackboard]
W. Poundstone, "Prisoner's Dilemma." In his *Prisoner's Dilemma*. New York, Doubleday, 1992, pp. 101-131. [Blackboard]
G. Hardin, "The Tragedy of the Commons," *Science* (New Series), December 13, 1968, Vol. 162, No. 3859, pp. 1243-1248. [JSTOR]

Week 2: Equilibrium Analysis and Social Science Models

Schelling, 1-6
M. Gardner, "The Fantastic Combinations of John Conway's New Solitaire Game 'Life.'" *Scientific American*, October 1970, Vol. 223, No. 4. [Blackboard]

Week 3: The 2-Person and N-Person Prisoner's Dilemma

Schelling, 7
D. R. Hofstadter, "The Calculus of Cooperation Is Tested Through a Lottery." *Scientific American*, June 1983, Vol. 248, No. 6, pp. 14-28. [Blackboard]

Week 4: The Evolution of Cooperation I

Axelrod, 1-4
J. Watson, 2002. "Repeated Games and Reputation." Chapter 22 of His *Strategy: An Introduction to Game Theory*." New York: Norton. [Blackboard]
D. R. Hofstadter, "Computer Tournaments of the Prisoner's Dilemma Suggest How Cooperation Evolves." *Scientific American*, May 1983, Vol. 248, No. 5, pp. 16-26. [Blackboard]
K. Schneider, "Unbending Regulations Incite Move to Alter Pollution Laws." *The New York Times*, November 29, 1993. [UT Libraries]
C. C. Mann and M. L. Plummer, "The Butterfly Problem" *Atlantic Monthly*, January 1992, Vol. 269, No. 1, pp. 47-70. [UT Libraries]
M. A. Nowak, R. M. May, and K. Sigmund, "The Arithmetics of Mutual Help." *Scientific American*, June 1995, Vol. 272, No. 6, pp. 76-81. [UT Libraries]
M. Milinsky, "Tit for Tat in Sticklebacks and the Evolution of Cooperation." *Nature*, January 29, 1987, Vol. 325, No. 6103, pp. 433-435. [UT Libraries]
C. Packer and A. E. Pusey, "Divided We Fall: Cooperation among Lions." *Scientific American*, May 1997, Vol. 276, No. 5, pp. 52-59. [UT Libraries]
G. S. Wilkinson, "Food Sharing in Vampire Bats." *Scientific American*, February 1990, Vol. 262, No. 2, pp. 76-82. [Blackboard]
(Optional) S. J. Brams, "The Paradox of Cooperation." In his *Paradoxes in Politics: An Introduction to the Nonobvious in Political Science*. Free Press, 1976, pp. 79-111. [Blackboard]

Week 5: The Evolution of Cooperation II

Axelrod, 5-9
R. B. Parks, "What if 'Fools Die'?: A Comment on Axelrod." *American Political Science Review*, December 1985, Vol. 79, No. 4, pp. 1173-1174. [JSTOR]
R. Boyd and J. P. Lorberbaum, "No Pure Strategy is Evolutionary Stable in the Prisoner's Dilemma Game." *Nature*, May 7, 1987, Vol. 327, No. 6117, pp. 58-59. [UT Libraries]
M. A. Nowak, R. M. May, and K. Sigmund, "The Arithmetics of Mutual Help." *Scientific American*, June 1995, Vol. 272, No. 6, pp. 76-81. [Blackboard]
A. Lloyd. "Computing Bouts of the Prisoner's Dilemma." *Scientific American*, June 1995, Vol. 272, No. 6, pp. 110-115. [Blackboard]
(Optional) J. Bendor and P. Swistak, "The Evolutionary Stability of Cooperation." *American Political Science Review*. June 1997, Vol. 91, No. 2, pp. 290-307. [JSTOR]

First Paper Due on Friday, February 17

Week 6: Reputational Concerns

M. Deutsch, "Trust and Suspicion." In *The Journal of Conflict Resolution*. December 1958, Vol. 2, No. 2, pp. 265-279. [JSTOR]
D. M. Kreps, "Corporate Culture and Economic Theory." In J. E. Alt & K. A. Shepsle, eds., *Perspectives on Positive Political Economy*. Cambridge: Cambridge, 1990. [Blackboard]
K. Hafner, "Seeing Fakes, Angry Traders Confront EBay." *The New York Times*, January 29, 2006. [Blackboard]

Week 7: The Problem of Collective Action I

Chong, 1-2.
R. Hardin, "Collection Action and Prisoner's Dilemma." In his *Collective Action*, Baltimore, Johns Hopkins University Press, 1982, pp. 16-37. [Blackboard]
N. S. Glance and B. A. Huberman, "The Dynamics of Social Dilemmas." *Scientific American*, March 1994, Vol.270, No. 3, pp. 76-81. [Blackboard]

Week 8: The Problem of Collective Action II

Chong, 3-6

Week 9: Spring Break

Week 10: Institutional Approaches to the Prisoner's Dilemma

R. Hardin, "Collective Action as an Agreeable n-Prisoners' Dilemma." *Behavioral Science*, 1971, Vol. 16, No. 5, pp. 472-479. [UT Libraries]
J. M. Orbell and L. A. Wilson, "Institutional Solutions to the N-Prisoners' Dilemma." *American Political Science Review*, June 1978, Vol. 72, No. 2, pp. 411-421. [JSTOR]
(Optional) J. Bendor and D. Mookherjee, "Institutional Structure and the Logic of Ongoing Collective Action." *American Political Science Review*, March, 1987, Vol. 81, No. 1, pp. 129-154. [JSTOR]

Second Paper Due on Friday, March 23

Week 11: Governing the Commons I

Ostrom, 1-5
M. Ridley and B. S. Low, "Can Selfishness Save the Environment?" *Atlantic Monthly*, September 1993, Vol. 272, No. 3, pp. 76-86. [UT Libraries]
B. Walsh, "How Business Saw the Light." *Time*, January 15, 2007 [Blackboard]

Week 12: Governing the Commons II

Ostrom, 6
E. Ostrom, J. Walker, and R. Gardner, "Covenants with and without a Sword: Self-Governance Is Possible." *American Political Science Review*, June 1992, Vol. 86, No. 2, pp. 404- 417. [JSTOR]
L. R. Beres, 1973. "Bipolarity, Multipolarity, and the Tragedy of the Commons." *The Western Political Quarterly*, 26(4):649-658. [JSTOR]

Week 13: The Internet as a Virtual Commons

Howard Rheingold, entire book
P. Kollock and M. Smith, "Managing the Virtual Commons: Cooperation and Conflict in Computer Communities." In S. Herring, ed., *Computer-Mediated Communication: Linguistic, Social, and Cross-Cultural Perspectives*.Amsterdam: John Benjamins, 1996, pp.109-128. Available online at <http://www.sscnet.ucla.edu/soc/csoc/papers/virtcomm/Virtcomm.htm>

Week 14-16: Student Presentations

Third Paper Due on Friday, May 4 (No Final Exam)