

## PPOL 504 Rational Choice

Prof. Frank Wayman            Fall Term 2010            Th. 6:10-9 PM  
Room 2265 SSB                            (100808, 1900 hr)

**Office Hours:** TTh 12:50-1:45 PM; T-Th 5:50-6:10 PM            Room 2164 SSB  
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### Objectives of the Course:

Good public policy requires that leaders make sound decisions. A good choice is a rational choice, so the study of rational choice is central to good policy making and to policy studies. This course examines the literature on rational choice, with an emphasis on more practical and applied studies that can aid practitioners who are trying to make rational decisions that will benefit communities. Rationality is an important and controversial topic in contemporary economics, political science, and related disciplines, so there are many important points of view to consider in the readings and class sessions. To narrow down the subject to what can be covered in a semester, the bulk of attention will be on decision making in public institutions (as opposed to private organizations, such as business firms and the family).

Examples will focus mostly on one foreign policy area (international security) and one domestic policy area (energy and environment), in which I am most familiar with policy making.

### Requirements:

Each exam will consist of a long essay part, plus another part consisting of some short answers and exercises. The essay will be selected by me on exam night, from 3 that will be passed out two weeks or more prior to the test. The essay will count 33% of the grade for the test, with the other 67% coming from the other questions.

The first exam (scheduled for Oct. 9) will count for 25% of the grade. There will be two additional exams, each counting 21%, one on Nov. 13th, and the other in the final exam period.

**Class participation will count for 10% of the grade.** As for the grade on class participation, attending class on a regular basis is required; effective participation in discussion will help your grade. **No laptop computers in class.**

A term paper will count for 23% of the grade. The term paper is basically a critical review of the assigned readings. Successful papers will be based on an approach or method drawn from the assignments. The overwhelming favorite topic last term was based on the Herek, Janis, and Huth reading (Sept. 20th in the syllabus); together, the class constructs a list of foreign policy crises of the past 25 years, then, each student examines one of the crises to see how well the decision makers followed the precepts of Janis's vigilant problem solving, and how well they were successful in the crisis. An alternative approach would involve writing a critical analysis of the Farmer, Luterbacher, or Sprinz essays. A third alternative is solving a game using the Morrow reading on game theory. The fourth approach will involve discussing the relevance of Allison, Janis, and Bueno de Mesquita 2003 edition to decision making in a policy area.

Each paper should be short (less than ten pages double spaced). Two copies must be turned in. Papers are due on Dec. 2nd.

Any late assignment without a signed letter from an M.D. or equivalent authority will result in a two-notch reduction in grade for that exam, paper, or project (e.g., a reduction from B- to straight C). Also, UM-D makes reasonable accommodations for persons with documented disabilities. Students should register with the Disability Resource Services Office within the first few weeks of the semester to be eligible for services that semester.

I have been asked by the Provost to include the following statement (which should go without saying): The University of Michigan values academic honesty and integrity. Each student has a responsibility to understand, accept, and comply with the University's standards of academic conduct as set forth in the Code of Academic Conduct, as well as policies established by the schools and colleges. Cheating, collusion, misconduct, fabrication, and plagiarism are considered serious offenses. Violations will not be tolerated and may result in penalties up to and including expulsion from the University.

The best statement I have seen on plagiarism comes from Professor Todayama in Japan: "Why do university professors try to inflict severe punishment for plagiarism? In the academic world, a rule such that 'truth and knowledge that a person has come at through concentrating their efforts, investigating, and thinking should fundamentally be shared among all human beings. However, such being the case, the person who came forth with the truth and knowledge should be given an equivalent amount of respect.' Plagiarism violates this rule. Strict reproach of plagiarism in a paper is based on the idea that students are also considered to be a member of this academic world" (Todayama, Kazuhisa, *Ronbun no Kyoshitsu*. Japan Broadcast Publishing Co., Ltd., 2002: 34-35.)

#### **Readings:**

Students should buy the following:

Graham Allison and Philip Zelikow, *Essence of Decision, 2nd edition*. N.Y.: Longman (division of Addison Wesley Longman), 1999. The second edition is substantially different from the first (which was written around 1971 by Allison alone), so be sure to read the second edition. ISBN 0-321-01349-2

Irving Janis, *Victims of Groupthink*. Boston: Houghton Mifflin, 1972. Boston: Houghton Mifflin, 1972. ISBN 0-395-04044-7

Robert Axelrod, *Evolution of Cooperation*. N.Y.: Basic Books, 1984; or Perseus Books Group revised edition 2006. I do not care which of these two you read. ISBN 0-465-02122-0 (1984 edition)

Jonathan Baron, *Thinking and Deciding, 4th edition*. Cambridge: Cambridge University Press.

A course pack, from Dollar Bill Copy ([www.dollarbillcopy.com](http://www.dollarbillcopy.com)).

In addition to these purchased items, we will be able to read items on-line. These are available through JSTOR and other services the library subscribes to.

#### **THE INSTRUCTOR:**

Prof. Wayman has been on the UM-D faculty since 1972. He has also taught courses at the University of Pennsylvania and on the Ann Arbor campus of this University. He has a B.A. from Cornell University and a Ph.D. from the University of Pennsylvania. A long-time associate of the Correlates of War Project at the University of Michigan, he has published many articles on the causes of war and the conditions of peace, and his *Resort to War* (CQ Press, 2008) describes each war since 1816. He is also an active scholar in the fields of American public opinion and of the effect of interest groups on Congress. His articles have been reprinted in such compendia as *Classics of International Relations*, *Classic Readings in American Politics*, and *Classics of Interest Group Behavior*. He has won the prize for the best paper at the Midwest Political Science annual meeting, as well as grants from the National Science Foundation and Resources for the Future. One of his current projects is *Prediction: Breakthroughs in Science, Markets, and Politics*, a conference and forthcoming edited book on the prediction of global conditions, and, in that endeavor, the proper role of "consilience," the quest for reduction and unity of the sciences. Recent book: *Resort to War* (2010); recent article: "Explaining the Onset of Mass Killing," *Journal of Peace Research*, 2010.

#### **Class Schedule and Readings:**

Week One. Class is Sept. 9: **Rational Choice and Omniscience. Preferences, Utilities, and Expected Utilities. Problems of having two goals (e.g., peace and victory; low inflation and full employment), for which policy instruments may produce trade-offs.**

#### **To be read by Sept. 11th:**

Graham Allison, "Conceptual Models and the Cuban Missiles Crisis," *American Political Science Review*, 63 (1969): 689-718. Retrieve thru JSTOR or PROQUEST.

Jonathan Bendor and Thomas Hammond, "Rethinking Allison's Models," *American Political Science Review* 86 (June 1992): 301-322. Retrieve thru JSTOR or PROQUEST.

Douglas Hibbs, "Political Parties and Macroeconomic Policy," *American Political Science Review* 71 (No. 4): (Dec. 1977): 1467-1487. Retrieve thru JSTOR or PROQUEST.

**In Class Sept. 9:** Course outline, and background of Cuban Missiles Crisis. Syllabus distribution, introductions. Handout: 17 areas of public policy. Handout on cost-benefit analysis. Omniscient rational (Allison) vs. purposive (Lamborn and Leggold) choice -- handout from Allan Lamborn and Joseph Leggold, *World Politics in the 21st Century*, ch. 15, p. 620: "To some, rationality means no more than that actors make purposive choices. However, many more people use rationality to refer not simply to purposive choice given ordered options, but also to the wisdom of actors' preferences and the quality of the process by which they identify and evaluate the options for achieving their goals." Indifference curves and choice when there are two orthogonal preferences: low inflation and full employment (Hibbs); peace and victory (Cuban missiles crisis). Historical background of Cuban Missiles Crisis; Allison's models I and II.

Weeks Two and Three. Classes are Sept. 16th and 23rd:  
**Organizational and Personal Impediments to Rational Choice: The Case of the Cuban Missiles Crisis.**

**To be read by Sept. 13th:**

Graham Allison and Philip Zelikow, *Essence of Decision: Explaining the Cuban Missiles Crisis, second edition*. N.Y.: Longman division of Addison Wesley Longman, 1999.

William Buchanan, *Understanding Political Variables, 4th ed.*. N.Y.: Macmillan. Chapter 16, "Costs, Benefits, and Risks." Read and do the exercises. Topics covered: Preferences, Utilities, and Expected Utilities. Handouts from environmental policy problems -- on cost/value of human life; value of nature; and risk assessment; standard present value calculations involving discount rate.

(Week Two in class will focus on first half of Allison and Zelikow book. Week Three will focus on second half of that book, and on Buchanan chapter.)

**In Class Sept. 16:** Hibbs (APSR 1977) on two policy goals, and on statics vs. dynamics. Present value formulas. Probability and the idea of expected utility. Film: "The Thirteen Days" -- first hour.

**In Class Sept. 23:** Film: "The Thirteen Days" -- second hour. Lecture on Allison's 3 models. Comparison of model 1 to benefit-cost analysis. Airport and dam building exercises; how interest rates (e.g., 6% vs. 8%) affect rational choice over long run. Herek, Janis and Huth on how vigilant problem solving leads to success in foreign policy (and how they measured it).

Review of correct answers to Buchanan exercises, esp. Buchanan p. 244.

Week Four. Class is Sept. 30th: **Vigilant Problem Solving as a Validated Procedure for Attaining Success in Diplomacy --**

**To be read by Sept. 20th:**

Gregory Herek, Irving Janis and Paul Huth, "Decision Making during International Crises: Is Quality of Process Related to Outcome," *Journal of Conflict Resolution* 31 (June 1987): 203-226. Retrieve thru JSTOR or PROQUEST.

**In Class Sept. 30th:**

Continuation of review of Buchanan exercises: pp. 248-249; expected utility. Handout packet on consumer price index and inflation. Lecture on discounting (to set up review of exercise on pp. 244-245 next week). Lecture on cognitive dissonance, to set up reading by Holsti on cognitive dynamics. Cuban crisis: End of film, "Thirteen Days"; dealing with Khrushchev's first and second letters.

Discussion of vigilant problem solving. For the alternative point of view (probably best limited to buying pizza and beer), that flash intuitions are best, see the bestseller, *blink*, by Malcolm Gladwell (N.Y.: Little Brown 2005).

Week Four. Class is Sept. 30th: **Beliefs and Their Resistance to Change.**

**To be read by class time on Sept. 30th:**

Ole Holsti, "Cognitive Dynamics and Images of the Enemy," in David Finlay, et al., *Enemies in Politics*. (Chicago: Rand McNally, 1967), pp. 25-96; Course Pack.

**In class Sept. 30th:** Discussion of Holsti article on cognitive dissonance theory and close-mindedness. Discounting calculations from Buchanan for 6% and 8% discount rate, for computer purchase decision. Groupthink and prospect theory mini-lectures. Discussion of what will be on test.

Week Five, Class is Oct. 7th:

**First exam is Oct. 7th.** Bring a blue book, a scan-tron form, and a number two pencil to all exams. Essay 18:20-18:45; short answer 18:45-19:30; multiple choice 19:30-19:45.

Week Six, Class is Oct. 14th: Psychological factors from group identity to prospect theory.

**Theory of Preferences, Theory of Beliefs; Group Identity and its Role in Purposive Human Choice:**

**To be read by Oct. 14th:**

Edward O. Wilson, "Consilience: The Role of Human Nature in the Emergence of Social Artifacts," (course pack) and Richard Alexander, "Darwin's Challenges and the Future of Human Society," chapters one and two in Wayman, Williamson, and Bueno de Mesquita, eds, *Prediction*. (course pack)

Bernard Grofman, Frank Wayman, and Matthew Barretto, "Rethinking Party ID: Some Thoughts on a Unified Theory," in John Bartle and Paolo Bellucci, eds., *Party Identification in Comparative Perspective*. (course pack)

Frank Wayman and Bernard Grofman, "Toward an Identity Theory Synthesis," typescript (course-pack).

**Group Dynamics:**

Irving Janis, *Victims of Groupthink, revised edition* (Boston: Houghton Mifflin, 1982), pay attention especially to first chapter and chapters on the cases of Pearl Harbor and Vietnam, and be sure to read chapters 8 and 9. You can skim over some of the other chapters to glean some ideas and historical examples.

**Prospect Theory and related psychological insights into human choice:**

Jonathan Baron, *Thinking and Deciding*, parts I and II.

Two articles by Jack Levy are recommended:

Jack Levy, "An Introduction to Prospect Theory," *Political Psychology* Vol. 13, No. 2 (June 1992): pp. 171-186. Retrieve thru JSTOR or PROQUEST.

Jack Levy, "Prospect Theory, Rational Choice, and International

Relations," *International Studies Quarterly* Vol. 41, No. 1 (March 1997): pp. 87-112. Retrieve thru JSTOR or PROQUEST.

**In Class Oct. 14th:** discussion of **group identity, groupthink,** and Prospect Theory; maybe Wilson and Alexander DVDs.

Return of exams till ca. 7 PM. Loss and gain exercise from Prospect Theory reading p. 174, ca. 19:00-19:40; Prisoner's Dilemma played ten rounds, ca. 20:00-21:00

Week Eight (Oct. 21st) and Nine (Oct. 28th):  
Rationality from the point of view of games and rational choice.  
theory:

**To be read by Oct. 28th: -- Game Theory** (do Morrow by class session 7, Oct. 21st, and Bueno de Mesquita and Cohn by class session 8, which is Oct. 28th):

James Morrow, *Game Theory for Political Scientists* (Princeton: Princeton U. Press, 1994), pp 16-116. Course pack.

Week Eleven -- Applications:

Bruce Bueno de Mesquita, *Principles of International Politics* (Washington, D.C.: CQ Press, 2000), pp. 34-35 (how different nations can each make the right choice for them but select different strategies), 48-52 (extensive and normal (or strategic) form; equilibria--Nash and sub-game perfect), 81-87 (iterated prisoner's dilemma), 100-107 (principals and agents), 118-130 (indifference curves and leaders' security in power vs. national security), 206-208 (common conjecture), 320-345 (perceptions, deterrence, and terrorism), 401-435 (alliances), 469-500 (strategic theories of war). Course pack.

Bruce Bueno de Mesquita, *Principles of International Politics, second edition.* (Washington, D.C.: CQ Press, 2003 edition), ch. 12, "Domestic Institutions and National Performance," pp. 379- 408. Course pack. Note: this material is based heavily on Bueno de Mesquita, Smith, Siverson, and Morrow, *The Logic of Political Survival* (MIT Press, 2003).

Jonathan Cohn, "Irrational Exuberance: When did political science forget about politics?" *New Republic* Oct. 25, 1999, pp. 25-31.

**In class Oct. 21st and Oct. 28th:** Play chicken game ten rounds; History of games I've run. Some ideas on term papers. Half-hour lecture on *Evolution of Cooperation*.

**Evolution, Value of the Future, and Shadow of Future** (weeks commencing Nov. 7th and Nov. 14th):

Evolution of Cooperation and Conflict:

Reading: Robert Axelrod, *Evolution of Cooperation*.

**THE SECOND EXAM, COVERING ALL THE ABOVE MATERIAL (FROM AXELROD BACK TO EXAM ONE) WILL BE ON THURS., NOVEMBER 11TH**

Problems in Knowing What the Future Holds, and What its Value Will Be:

Detlef Sprinz on generations; Doyne Farmer on rationality and irrationality in discounting. From Wayman, Williamson, and Bueno de Mesquita, eds., *Prediction: Breakthroughs in Science, Markets, and Politics*. (forthcoming, Univ. of Michigan Press)

Recommended:

Philip Streich and Jack S. Levy, "Time Horizons, Discounting, and Intertemporal Choice," *Journal of Conflict Resolution* Vol. 51, No. 2 (April 2007): 199-226. Retrieve thru JSTOR or PROQUEST. There is more in Streich and Levy about the implication of ideas like Farmer's to Axelrod's *Evolution of Cooperation*.

**In class (Nov. 6th):** Seeing DVD of Luterbacher, Sprinz and Farmer (20 min. each), discussion. Club of Rome, Hardin, and readings discussion.

**In Class (Nov. 13th): 6:10-7:10 PM test, EXAM II.** Class would resume at 7:30 PM, and we would have a class session for the remainder of the time till 9 PM, after the completion of the exam.

Solutions of deterrence games with resolute defender, irresolute defender, and imperfect information. For imperfect information, cardinal utilities in place of preference orders, and examples of values of utilities which tip game outcome from successful to unsuccessful deterrence. Fifteen minutes on Rawls for coming weeks. Fifteen minutes on dam building simulation for coming weeks.

Weeks Twelve-Thirteen (Nov. 21st and Nov. 28th):

Thanksgiving Day is Nov. 25th, so we have only one class meeting in these two weeks. This is a good time to redouble efforts on term paper.

**Multiple Actors and Conflicting Goals** (Weeks starting Sun., Nov. 21st, and Sun., Nov. 28th):

Arrow's Paradox, from Bueno de Mesquita, *Principles of International Politics* (2000 edition), pp. 34-35. Course pack.

**Rawlsian Social Justice:**

Douglas Rae, "Maximin Justice and an Alternative Principle of General Advantage," *American Political Science Review* 64 (June 1975): 630-647. Retrieve thru JSTOR or PROQUEST.

Wayman, "Prediction of Macro-Social Behavior from Individual and Biological Levels of Analysis: Problems in Evolution of Conflict," Sept. 23-25, 2005, from Wayman, Williamson, and Bueno de Mesquita, eds., *Prediction: Breakthroughs in Science, Markets, and Politics*. (forthcoming, Univ. of Michigan Press). Course pack.

**In class on Nov. 20th:** Rawls thru Ray's exercises on hospital sites and primary goods.

Week Fourteen, which is Week starting Sun., Dec. 5th: **Applying the Lessons of the Course in Life Work and Social Action:**

Jonathan Baron, *Thinking and Deciding*, part III.

Gladwell, *Outliers*, pp. 15-55 (course pack)

Recommended: Mancur Olson, *The Rise and Decline of Nations*, pp. 1-74.

Robert Reich on value to good public policy from decisions based on interest group inter-mediation, public deliberation, or cost/benefit analysis: Robert B. Reich, "Policy Making in a Democracy," ch. 6, pp. 123-156, in Robert B. Reich, ed., *The Power of Public Ideas*. Cambridge, Mass.: Ballinger, 1988. U Library call number JK1764 P681 1987. Course pack.

**In class on Dec. 9th:** discussion of Reich, and simulation of dam building, to highlight pros and cons of various decision making rules from Reich, "Policy Making in Democracy."

**Final Exam is 6:30-7:30 PM, Thurs., Dec 16th.**

## Essay Questions for Exams 1, 2, and 3

### EXAM ONE.

One of the following questions will be on the exam. Prepare 25-minute answers to each question. (For one-third of exam grade) Please put the answer to Part I in a blue book, and write the answer with a pen. The blue book will be collected in 25 minutes. Then you should go on to the rest of the exam.

1. Discuss what the readings (especially Allison and Janis) have to say about how to make a good public policy decision.
2. Discuss the strengths and weaknesses of Allison's three analyses of the Cuban missiles crisis. [Remember, as we discussed in class when I handed out these three essay questions, his three models are designed to *explain* what happens, not to say what should be done. Thus, in this context, it is not a "strength" of a model that following it would lead to good public policy -- obviously Model I is the best way to make good policy. Rather, an *explanatory* model is strong if it accounts for a large amount of what happens.] How important were the national interest, the organizational priorities and routines, and the political interests of individual actors (i.e., Models I, II, and III) in the crisis?
3. Discuss the strengths and weaknesses of cost-benefit analysis in making public policy decisions.

### EXAM 2



Part I. Major Essay. Prepare 25-minute answers to each of the following questions. One will be on the exam. (For one-third of exam grade)

PLEASE USE BLUE BOOK, WHICH WILL BE COLLECTED AT THE END OF THE WRITING SECTION OF THE EXAM.

1. There are two different models of learning how to make rational decisions in a game theory context. One is the model that dominates in Morrow, which involves a mathematical approach of solving a game to find the equilibrium. Another is the model that dominated thinking in the class simulations of the iterated prisoner's dilemma and chicken games; it is also the approach in Axelrod, *Evolution of Cooperation*. In the latter approach, there is no equilibrium and the best outcome is discovered by watching how people play the game and observing what is effective. Discuss the pros and cons of these two approaches.
2. What are the lessons from Axelrod's game theory, including prisoner's dilemma, and the ways we played prisoner's dilemma and chicken in class, for the study of public policy?
3. Aristotle spoke of formal, efficient, and final causes, and game theory can be seen as bringing the formal and final causes back into a social science that had only efficient causes and needed to take motives and goals better into account. On the other hand, it is possible to overdue something (Cohn, "Irrational Exuberance," is a bit light but illustrates this point). What do you see as the pros and cons of game theory for public policy?

### **EXAM 3**

Part I. Major Essay. Prepare 25-minute answers to each of the following questions. One will be on the exam. (For one-third of exam grade)

PLEASE USE BLUE BOOK, WHICH WILL BE COLLECTED AT THE END OF THE WRITING SECTION OF THE EXAM.

1. What can we learn from Rawls, Rae, and Reich about the public choice problems that are faced in public policy? Based on these readings, what is the best way for democratic collectivities (like the people of the U.S., or of Michigan) to make good public policy?
2. What are some of the problems in making decisions that affect the future as well as the present? You should draw on the ideas of Farmer, Luterbacher, Sprinz, and Hofstadter/Axelrod.

3. What are the major ideas in Wayman's paper Wayman, "Prediction of Macro-Social Behavior from Individual and Biological Levels of Analysis: Problems in Evolution of Conflict," Sept. 23-25, 2005, from Wayman, Williamson, and Bueno de Mesquita, eds., *Prediction: Breakthroughs in Science, Markets, and Politics*. (forthcoming, Univ. of Michigan Press)? How do these ideas apply to public policy?