# PSC 576 Modeling International Conflict

Spring 2006 Tues, 3:20-6pm Harkness 112

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**PURPOSE:** This course is intended for advanced graduate students interested in formal and quantitative analysis of international conflict. It pulls together various techniques for such analysis and applies those techniques in a systematic manner to issues in international conflict. Particular attention will be paid to formalizing theories of conflict and then testing those theories with statistical models derived from the formalizations. The goal will be for students to (1) derive or prove results presented by the various authors, (2) identify contributions made by the authors, and (3) identify ways to improve upon the research. Because the course involves the application of game-theoretic and statistical techniques, students must have completed graduate courses in (1) mathematical statistics, (2) introductory econometrics, and (3) introductory game theory.

**COURSE REQUIREMENTS:** There are two requirements for this course: a research paper (50%) and weekly presentations of articles (50%). The main requirement is a 20-30 page paper, which must be original research, single authored, and on a topic that is consistent with the course. The final paper will be due the first day of class of the Fall semester.

In addition to the paper, each week each student will be responsible for presenting and critiquing one of the articles below. The presentation should consist of (1) a summary of the article's main points, (2) proofs or derivations of technical results, and (3) a critique of the paper. Overhead transparencies are not required. However, handouts should be provided for everyone in the class.

**READINGS:** Almost all of the readings are articles. Many are available on JSTOR. Readings will be assigned two weeks in advance. For an article not available on JSTOR, the student presenting it is also responsible for ensuring the rest of the class has access to it a week in advance.

# **COURSE SCHEDULE:**

# 1. Organizational Meeting

# 2. Rational Choice and International Relations

- Myerson, Roger. 1992. "On the Value of Game Theory in Social Science." *Rationality and Society.* 4(1).
- Walt, Steven. Spring 1999. "Rigor or Rigor Mortis". IS.

- Bueno de Mesquita, Bruce and James Morrow. Fall 1999. "Sorting through the wealth of notions". IS. 24(2).
- Martin, Lisa. Fall 1999. "The contributions of rational choice: a defense of pluralism". IS. 24(2).
- Niou, Emerson and Peter Ordeshook. Fall 1999. "Return of the Luddites". IS. 24(2).
- Powell, Robert. Fall 1999. "The modeling enterprise and security studies". IS. 24(2).
- Zagare, Frank C. Fall 1999. "All mortis, no rigor". IS. 24(2).
- Walt, Stephen. Fall 1999. "A modeling disagreement". IS. 24(2).
- Quackenbush, Stephen L. 2004. "The Rationality of Rational Choice Theory. II. 30(1).

# 3. Bargaining, Inefficiency, and War

- Morrow, James. 1989. "Capabilities, Uncertainty, and Resolve." AJPS. 33(4).
- Banks, Jeff. 1990. "Equilibrium Behavior in Crisis Bargaining Games." AJPS. 34(3).
- Fearon, James. 1995. "Rationalist Explanations for War." IO. 49(3).
- Gartzke, Erik. 1999. "War is the Error Term". IO.
  - Coletta, Damon and Erik Gartzke. 2003. "Testing War in the Error Term." IO. 57(2).
- Wagner, R. Harrison. 2000. "Bargaining and War". AJPS. Vol. 44, no. 3.
- Voeten, Erik. 2001. "Outside Options and the Logic of Security Council Action." American Political Science Review. 95(4).
- Slantchev, Branislav L. 2003. "The Power to Hurt." APSR. 97(1).
- Powell, Robert. 2004. "The Inefficient Use of Power: Costly Conflict with Complete Information." APSR. 98(2).
- Butler, Christopher K. 2004. "Modeling Compromise at the International Table." *CMPS*. 21(3).
- Powell, Robert. 2005. "War as a Commitment Problem." IO.
- Slantchev, Branislav. 2005. "Military Coercion in Interstate Crises." APSR. 99(5).
- Leventoglu, Bahar and Ahmer Tarar. "War and Incomplete Information." Working Paper.

#### 4. Deterrence

- Nalebuff. 1986. "Rational Deterrence in an Imperfect World." World Politics. 43(April).
- Powell, Robert. 1987. "Crisis Bargaining, Escalation, and MAD." APSR. 81(3).
- Powell, Robert. 1988. "Nuclear Brinkmanship with Two-Sided Incomplete Information." APSR. 82(March):155–178.

- Zagare, Frank C. 1990. "Rationality and Deterrence." World Politics. 42(2).
- Kilgour, Marc and Frank C. Zagare. 1991. "Credibility, Uncertainty, and Deterrence." *AJPS*. 35(2).
- Zagare Frank C. and Marc Kilgour. 1993. "Asymmetric Deterrence." ISQ. 37(1).
- Fearon, James. 1994. "Signaling versus the Balance of Power and Interests." JCR. 38(2).
- Zagare, Frank C. and D. Marc Kilgour. 1995. "Assessing Competing Defense Postures: The Strategic Implications of "Flexible Response." World Politics. 47(3).
- Fearon, James. 2002. "Selection Effects and Deterrence." II. 28(1).
- Signorino, Curtis S. and Ahmer Tarar. 2006. "A Unified Theory and Test of Extended Immediate Deterrence." *AJPS*. Forthcoming.

#### 5. Cheap Talk, Diplomacy, and Mediation

- Farrell and Gibbons. 1989. "Cheap Talk Can Matter in Bargaining." Journal of Economic Theory. 48(1).
- Kydd, Andrew. 2003. "Which Side are You On?" emphAJPS. 47(4).
- Sartori, Anne. 2002. "A Reputational Theory of Communication in Disputes." IO. 56(1).
- Ramsay, Kristopher. 2004. "Politics at the Water's Edge." JCR. 48(4).

#### 6. Alliances and the Balance of Power

- Wagner, Harrison. 1986. "The Theory of Games and Balance of Power." World Politics. 38(4).
- Niou, Emerson and Peter Ordeshook. 1987. "Preventive War and the Balance of Power." *JCR*. 31(3).
- Niou, Emerson and Peter Ordeshook. 1990. "Stability in Anarchic International Systems." APSR. 84(4).
- Niou, Emerson and Peter Ordeshook. 1994. "Alliances in Anarchic International Systems." *ISQ.* 38(2).
- Wagner, Harrison. 1994. "Peace, War, and the Balance of Power." APSR. 88(3).
- Morrow, James. 1994. "Alliances, Credibility, and Peacetime Costs." JCR. 38(2):270–97.
- Sorokin, Gerald. 1994. "Alliance formation and general deterrence." JCR. Vol. 38, no. 2.
- Smith, Alastair. 1995. "Alliance Formation and War." ISQ. 39(4).
- Smith, Alastair. 1996. "To Intervene or Not to Intervene." JCR. 40(1).
- Powell, Robert. 1996. "Stability and the Distribution of Power". World Politics.

- Smith, Alastair. 1998. "Extended deterrence and alliance formation". *II.* Vol. 24, no. 4. (Note: Be careful of typos.)
- Signorino, Curtis S. and Jeffrey M. Ritter. 1999. "Tau-b or Not Tau-b: Measuring the Similarity of Foreign Policy Positions." *ISQ.* 43(1).

### 7. Power Transition

- Kim, Woosang and James Morrow. 1992. "When Do Power Shifts Lead to War?" *AJPS*. 36(4).
- Organski, Kenneth and Jacek Kugler. 1993. "The Power Transition." in Midlarsky, ed., Handbook of War Studies.
- Powell, Robert. 1996. "Uncertainty, Shifting Power, and Appeasement." APSR. 90(4):749–764.
- Powell, Robert. 1999. Chapter 4, "Bargaining in the Shadow of Shifting Power." In the Shadow of Power. Princeton.
- Fearon, James. "Bargaining over Objects that Influence Future Bargaining Power." forthcoming.

#### 8. Cooperation and Repeated Interaction

- Bendor, Jonathan and Mookherjee. 1990. "Norms, Third Party Sanctions, and Cooperation." *JLEO*. 6(1).
- Bendor, Jonathan. 1993. "Uncertainty and the Evolution of Cooperation." JCR. 37(4).
- Signorino. Curtis S. 1996. "Simulating International Cooperation Under Uncertainty." *JCR*. 40(1).
- Bendor, Jonathan and Piotr Swistak. 1997. "The Evolutionary Stability of Cooperation." *APSR*. 91(2).
- Cederman, Lars-Erik. 2001. "Modeling the Democratic Peace as a Kantian Selection Process." *JCR*. 45(4).
- Cederman, Lars-Erik. 2004. "Conquest and Regime Change." JCR. 48(3).

# 9. Arms Races

- Morrow, James. 1997. "When do relative gains impede trade?". JCR. 41(1).
- Kydd, Andrew. 1997. "Game theory and the spiral model". World Politics.
- Fearon, James. 1998. "Bargaining, Enforcement, and International Cooperation". IO. 52(2).
- Kydd, Andrew. 2000. "Trust, reassurance, and cooperation". IO. 54(2).
- Kydd, Andrew. 2000. "Arms Races and Arms Control." AJPS. 44(2).

• Baliga, Sandeep and Tomas Sjstrm. 2004 "Arms Races and Negotiations." *Review of Economic Studies*. (71)2.

# 10. Domestic Politics: Two-Level Games

- Iida, Keisuke. 1993. "When and How Do Domestic Constraints Matter?" JCR. 37(3).
- Mo, Jongryn. 1994. "Two-level Games with Endogenous Domestic Coalitions." JCR. 38(3).
- Mo, Jongryn. 1995. "Domestic Institutions and International Bargaining: The Role of Agent Veto in Two-Level Games." APSR. 89(4).
- Tarar, Ahmer. 2001. "International Bargaining with Two-Sided Domestic Constraints." *JCR*. 45(3).
- Tarar, Ahmer. 2005. "Constituencies and Preferences in International Bargaining." *JCR*. 49(3).

### 11. Domestic Politics, pt II

- Kilgour, Marc. 1991. "Domestic Political Structure and War Behavior." JCR. 35(2).
- Morgan, T. Clifton and Valerie Campbell. 1991. "Structure, Decisional Constraints, and War." *JCR*.
- Richards, Diana, T. Clifton Morgan, Rick Wilson, Valerie Schebach, and Gary Young. 1993. "Good Times, Bad Times, and the Diversionary Use of Force: a tale of some not-so-free agents". JCR. Vol. 37, no. 3.
- Downs, George and David M. Rocke. 1994. "Conflict, Agency, and Gambling for Resurrection." *AJPS*. 38(2).
- Fearon, James. 1994. "Domestic Political Audiences and the Escalation of International Disputes." APSR. 88(3).
- Fearon, James. 1997. "Signaling foreign policy interests: tying hands versus sinking costs". *JCR.* Vol. 41, no.1.
- Schultz, Kenneth. 1998. "Domestic opposition and signaling in international crises". APSR. 92(4).
- Smith, Alstair. 1998. "International Crises and Domestic Politics". APSR. 92(3).

#### 12. Domestic Politics, pt III

- Bueno de Mesquita, Bruce, James Morrow, Randolph Siverson, and Alstair Smith. 1999. "An institutional explanation of the democratic peace". APSR. 93(4).
- Gowa, Joanne. Spring 1998. "Politics at the Water's Edge: Parties, Voters, and the Use of Force Abroad". *IO*.

- Schultz, Kenneth. 1999. "Do Democratic Institutions Constrain or Inform? Contrasting Two Institutional Perspectives on Democracy and War". *IO.* Spring.
- Bueno de Mesquita, Bruce, Alstair Smith, Randolph Siverson, and James Morrow. 2003. *The Logic of Political Survival*. MIT Press.
- Fang, Songying. 2005. "The Informational Role of International Institutions and Domestic Politics." Working paper.
- Leventoglu, Bahar and Ahmer Tarar. "Prenegotiation Public Commitment in Domestic and International Bargaining" (with Bahar Leventoglu). American Political Science Review 99(3).

#### 13. Common Knowledge, Common Priors, and War

- Aumann, Robert J. 1976. "Agreeing to Disagree." The Annals of Statistics. 4(6).
- Milgrom, Paul. 1981. "An Axiomatic Characterization of Common Knowledge." *Econometrica* 49(1).
- Geanakoplos, John and Heraklis M. Polemarchakis. 1982. "We Can't Disagree Forever." Journal of Economic Theory 28(2).
- Sebenius, James K. and John Geanakoplos. 1983. "Don't Bet on It: Contingent Agreements with Asymmetric Information." *Journal of the American Statistical Association*. 78(382).
- Rubinstein, Ariel and Asher Wolinsky. 1990. "On the Logic of 'Agreeing to Disagree' Type Results." *Journal of Economic Theory* 51.
- Geanakoplos, John. 1992. "Common Knowledge." The Journal of Economic Perspectives 6(4).
- Morris, Stephen. 1995. "The Common Prior Assumption in Economic Theory." *Economics* and Philosophy 11(2).
- Gul, Faruk. 1998. "A Comment on Aumann's Bayesian View." *Econometrica*. 66(4).
  - Aumann, Robert J. 1998. "Common Priors: A Reply to Gul." *Econometrica*. 66(4).
- Fey, Mark and Kristopher Ramsay. "Mutual Optimism and War." Working Paper.
- Smith, Alastair and Allen C Stam. 2004. "Bargaining and the Nature of War." *Journal of Conflict Resolution* 48(6).
- Fey, Mark and Kristopher Ramsay. "The Common Priors Assumption." Working Paper.

# 14. War Termination

- Wittman, Donald. 1979. "How War Ends: A Rational Model Approach." JCR. 23(4).
- Smith, Alastair. 1998. "Fighting Battles, Winning Wars." JCR. 42(3).
- Slantchev, Branislav L. 2003. "The Principle of Convergence in Wartime Negotiations." APSR. 97(4).

• Mattes, Michaela and T. Clifton Morgan. 2004. "When Do They Stop?" CMPS. 41(1).

# 15. Models and Empirical Testing

- Beck, Nathaniel, Jonathan N. Katz and Richard Tucker. 1998. "Taking Time Seriously: Time-Series-Cross-Section Analysis with a Binary Dependent Variable" (in Workshop). *AJPS*. 42(4).
- Smith, Alastair. 1999. "Testing Theories of Strategic Choice: The Example of Crisis Escalation" (in Workshop). *AJPS*. 43(4).
- Signorino, Curtis S. 1999. "Strategic Interaction and the Statistical Analysis of International Conflict" APSR.
- Signorino, Curtis S. 2000. "Theoretical Sources of Uncertainty in Discrete Choice Models"
- Beck, Neal, Gary King and Lengche Zeng. 2000. "Improving Quantitative Studies of International Conflict: A Conjecture." APSR. 94(1).
- Signorino, Curtis S. and Kuzey Yilmaz. 2003. "Strategic Misspecification in Regression Models." *AJPS*.
- Lewis, Jeffrey B. and Kenneth A. Schultz. 2003. "Revealing Preferences." PA. 11(4).
- Signorino, Curtis S. 2003. "Structure and Uncertainty in Discrete Choice Models." PA. 11(4).
- Signorino, Curtis S. and Taehee Whang. 2005. "Comparing Statistical Models of Strategic Choice." Working Paper.