#### **POLITICAL SCIENCE 388**

#### SPRING 2010

MW 2:30-3:45 / PUP 206

N. R. Miller

## http://userpages.umbc.edu/~nmiller/POLI388/index.htm

## INTERNATIONAL CONFLICT AND COOPERATION

#### **Readings** Available in the Book Center:

Avinash K. Dixit and Barry J. Nalebuff, THINKING STRATEGICALLY: THE COMPETITIVE EDGE IN BUSINESS, POLITICS, AND EVERYDAY LIFE (Norton, 1991)

Robert F. Kennedy, *THIRTEEN DAYS: A MEMOIR OF THE CUBAN MISSILE CRISIS* (Norton, 1968; rev. ed.1999)

Thomas C. Schelling, ARMS AND INFLUENCE (Yale, 1967; rev. ed. 2008)

*Note*: The UMBC Library owns two copies each of *Thirteen Days* and *Arms and Influence* (1967 ed.), which have been placed on reserve with a three-day loan period. However, it is recommended that you acquire personal copies of these books. Some*additional required readings* will be available through the course website. The PowerPoint slides used in class and any class handouts will be posted on the course website.

#### Course Objectives:

This is an upper-level political science course, designed to be suitable for both majors and interested non-majors. The course has three principal objectives:

- (1) To introduce you to game theory at an introductory level, including basic concepts, terminology, analytic techniques, and conclusions.
- (2) To develop your understanding of *conflict* and *cooperation*, not only in international politics but also in (American and other) domestic politics and in political, economic, and social interactions more generally (so this is by no means exclusively an "international relations" class).
- (3) To increase your understanding of international behavior and strategic issues.

#### Course Requirements:

- (1) Regular attendance and participation in class discussions.
- (2) Several Problems Sets pertaining to the game theory topics covered in Section I of the course.
- (3) An in-class short-answer First Midterm Test, covering the readings, lectures, class discussion, and Problem Sets for Section I. of the course.
- (4) A take-home Second Midterm Test covering aspects of Section II of the course.
- (5) A Research Report on a particular case of international (or possibly other) strategic interaction, conflict, crisis, or negotiation. The report should follow a prescribed template reflecting the concepts and analytical techniques introduced in the course (see the final section

of the syllabus). Further guidelines and suggested topics will be distributed early in the semester. Preliminary reports will be presented in class during the last three weeks of the semester, and the final written report will be due at the end of the exam period.

(6) A short-answer Final Exam, comprehensive in nature but emphasizing readings, lectures, class discussion, and student presentations in Sections II, III, and IV of the course.

Make-up exams will be given only if your present a reasonable and timely excuse for not taking the exam at the regular time. Ordinarily, a "timely" excuse is one that reaches me or the Political Science Secretary prior to the regular exam time, and the make-up exam must be arranged and completed prior to the next class meeting if possible.

## Class Attendance:

Regular class attendance is expected and, I believe, will be necessary for satisfactory completion of the course. The plight of students who repeatedly miss class will not be viewed sympathetically by the instructor.

## Course Grade:

Each course requirement (2) through (5) above will be graded. Your course grade will be based on these requirements as follows:

(1)	Problem Sets and Class Participation	10%
(2)	In-Class Midterm Test	20%
(3)	Midterm Take-Home Assignment	15%
(4)	Research Report (including class presentation)	25%
(5)	Final Exam	30%

However, failure to complete any course requirement (2) through (5) or submission of a plagiarized take-home assignment or research report will result in a grade of F for the course, regardless of other grades. Faithful class attendance, exceptional class participation, faithful completion of Problem Sets, and improvement over the semester can provide a small bonus to your grade. No "extra Credit" work will be accepted.

## Academic Integrity:

By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal. To read the full Student Academic Conduct Policy, consult the UMBC Student Handbook, the UMBC Policies section of the UMBC Directory, or go to http://www.umbc.edu/integrity.

#### **POLI 388**

#### Office Hours and Messages:

Most questions and problems can be handled in the classroom immediately before or after class. If you need to talk with me at more length or in private, my office is PUP 321, and my official office hours for the Spring 2010 semester will be MW 4:00-5:00, with other times readily available by arrangement. Since I will not always be able to keep my office hours, I recommend that you make a specific appointment, which can usually be arranged before or after class. I can also be reached in any way listed below. *Communication by email is encouraged for all purposes*.

E-mail:	nmiller@umbc.edu
Office phone (with 24-hour "voice mail"):	(410) 455-2187
Political Science Department (to leave message):	(410) 455-2568
Home (if need be, but not after 10:00 PM):	(410) 381-3605

If you contact me by email, I will reply to whatever email address you use. However, if you ask about grades or other private information, you must use your UMBC email address. If I have reason initiate email contact with you, I will use your UMBC email address, so you should check your UMBC email on a regular basis.

#### Course Website:

There is a course web page at http://userpages.umbc.edu/~nmiller/POLI388/index.htm (or UMBC home page => Departments => Political Science => Faculty => N. R. Miller => Poli 388), which can be accessed from any computer with an Internet connection. (Note: this is an ordinary webpage, *not* a Blackboard site.) Backup copies of the syllabus, PowerPoint slides, class handouts, and other course material will be posted here, as well as announcements, some required readings, and supplementary documents In addition, this page provides links to many political organizations, media outlets, data sources, documents, on-line demonstrations, and other resources for political learning and research. When students ask questions by email, I will answer them individually by email but, when the question is of general interest, I will also post my response on the Bulletin Board — Q & A section of the web page, so that other students are urged to check the course web page periodically.

#### **COURSE OUTLINE**

This outline (including dates for the midterm tests) is tentative and subject to change. Readings should be completed *prior* to the class day under which they are assigned and should be reviewed thereafter.

Chapters 4-8 and 10 (and a few case studies in Chapter 13) of Dixit and Nalebuff are linked with specific topics in the course outline, and accordingly they are not assigned in numerical order. However, Dixit and Nalebuff's general mode of exposition is to start with examples and then look for general principles, so I strongly recommend that, during the first weeks of the semester, you read straight through Dixit and Nalebuff's chapters (except 11 and 12) in numerical order and then review individual chapters as particular topics come up on the syllabus. (There is much interesting material in their remaining chapters but it is not particularly relevant to this course.) Note that there is a lot of reading for Topic #20, so I also recommend that you also read Robert Kennedy's*Thirteen Days* early in the semester — it's short and you won't find it boring.

Readings not available in the Book Center may be accessed through the course webpage. Click on **Course Syllabus** and then on the specific reading (which will be highlighted). If the reading is marked **[E-Reserves]**, you will need to use a password (that will be distributed later in the semester).

#### 1. (January 27) Introduction and Overview

#### I. CONFLICT AND COOPERATION: THE THEORY OF GAMES

2. (February 1) Playing Games

Social Coordination Games Fair Division, the Ultimatum Game, and Bargaining Social Dilemma Game The Centipede Game The Dollar Auction Game

Schelling, ARMS AND INFLUENCE, Preface to 2008 Edition and Preface

#### 3. (February 3) **Overview of Game Theory**

Strategies Payoffs One-Player Games (Games Against Nature) The Payoff Matrix (Strategic Form) Undominated and Dominant Strategies Maximin Strategies

Dixit and Nalebuff, THINKING STRATEGICALLY, Part I

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## 4. (February 8) Classic 2×2 Simultaneous Choice Games

Matching Pennies (Coordination) Battle of the Sexes (Coordination and Conflict) Prisoner's Dilemma Chicken Nash Equilibrium

Dixit and Nalebuff, THINKING STRATEGICALLY, Chapters 2-3 (review) and 4

#### 5. (February 10) Zero-Sum (Total Conflict) Games

Strictly Determined Zero-Sum Games ("Battle of the Bismark Sea") Saddlepoint Non-Strictly Determined Zero-Sum Games ("D-Day Invasion") Mixed Strategies The Minimax Theorem

Dixit and Nalebuff, *THINKING STRATEGICALLY*, Chapters 2-3 (review again) and 7

#### 6. (February 15) Variations on 2×2 Games

Sequential Play Preplay Communication (Cheap Talk) Strategic Intelligence Strategic Deception Credible Commitment Threats and Promises

Dixit and Nalebuff, THINKING STRATEGICALLY, Chapters 5 and 6

#### 7. (February 17) Non-Cooperative Games

The Extensive vs. Strategic Form Perfect vs. Imperfect Information Backwards Induction ("Look ahead and reason back")

Dixit and Nalebuff, *THINKING STRATEGICALLY*, Chapter 2 (review once again) and Chapter 13, Cases Studies #2, #3, and #5

#### 8. (February 22) **Other Game Theory Topics**

Complete vs. Incomplete Information Repeated Games and Reputation Effects Side Payments and Transferable Utility Cooperative Games and the Core Simple Games

Dixit and Nalebuff, *THINKING STRATEGICALLY*, Chapters 5 and 6 (review) and Chapter 13, Case Studies #8 and #9

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# 9. (February 24) Voting and Social Choice Majority Rule and the Median Voter Sincere (or Naive) vs. Strategic Voting Agenda Control Veto Games Dixit and Nalebuff, THINKING STRATEGICALLY, Chapter 10 10. (March 1) Bargaining and Bargaining Tactics Thomas Schelling, "An Essay on Bargaining," American Economic Review, June 1956 [E-Reserve] Dixit and Nalebuff, THINKING STRATEGICALLY, Chapters 5 and 6 (review once again) and Chapter 13, Case Study #12

- 11.(March 3)Bargaining and Bargaining Tactics (cont.)
- 12. (March 8) IN-CLASS MIDTERM TEST

## II. INTERNATIONAL CONFLICT AND COOPERATION

## 13. (March 10) Secrecy, Surprise, and Deception

J. Masterman, *THE DOUBLE-CROSS SYSTEM* (1972), Chapter 1 [E-Reserves] Dixit and Nalebuff, *THINKING STRATEGICALLY*, Chapter 7, review

## 14. (March 22) **Defense, Deterrence and Endurance**

Defense and Offense Deterrence and Compellence Absolute and Relative Gains Endurance Contests

Schelling, *ARMS & INFLUENCE*, Chapter 1 ("The Diplomacy of Violence") Dixit and Nalebuff, *THINKING STRATEGICALLY*, Chapter 13, Case Study #12

## 15. (March 24) Specific Deterrence and Compellence

Schelling, ARMS & INFLUENCE, Chapter 2 ("The Art of Commitment") Dixit and Nalebuff, *THINKING STRATEGICALLY*, Chapter 5, review

## 16. (March 29) Credibility and General Deterrence

James Payne, *THE AMERICAN THREAT* (1970), Chapter 1 ("The Appeasement Theory of War") [E-Reserves]
Dixit and Nalebuff, *THINKING STRATEGICALLY*, Chapter 6, review

#### 17. (March 31) The Security Dilemma, Deterrence, and the Spiral Model

James Payne, THE AMERICAN THREAT (1970), Chapter 2 ("The Excitation Theory of War and the Status Quo") [E-Reserves] Schelling, ARMS AND INFLUENCE, Chapter 6 ("The Dynamics of Mutual Alarm")

#### 18. (April 5) Brinksmanship, Escalation, and Crisis

Schelling, *ARMS & INFLUENCE*, Chapter 3 ("The Manipulation of Risk") Dixit and Nalebuff, *THINKING STRATEGICALLY*, Chapter 8 Kennedy, *THIRTEEN DAYS*, entire (including documents) TAKE HOME MIDTERM ASSIGNMENT DISTRIBUTED

## III. THE COLD WAR AND THE STRATEGIC IMPLICATIONS OF NUCLEAR WEAPONS

### 19. (April 7) Nuclear Origins

Albert Wohlstetter, "The Delicate Balance of Terror," *Foreign Affairs*, January, 1958

#### 20. (April 12) Mutual Assured Destruction (MAD)

Schelling, ARMS & INFLUENCE, Chapter 5 ("The Diplomacy of Ultimate Survival")
TAKE HOME MIDTERM ASSIGNMENT DUE

21. (April 14) Nuclear Strategy

Counterforce vs. Countervalue Controlled Response Extended Deterrence War by Accident

Robert McNamara (Secretary of Defense), "The No Cities Doctrine" (1962) Schelling, *ARMS &INFLUENCE*, Chapter 4 ("The Idiom of Military Action")

22. (April19) **Nuclear Options** *Civil Defense Strategic Defense Arms Control Nuclear Proliferation Nuclear Terrorism* 

Schelling, *ARMS &INFLUENCE*, Chapter 7 ("The Dialogue of Competitive Armament")

## V. CASE STUDIES AND CURRENT ISSUES

23-29. (April 21 — May 12) STUDENT RESEARCH PRESENTATIONS

Final Exam: Monday, May 17, 1:00-3:00 PM, in SS 113

Papers Due: Friday, May 21, by email

#### **Template for Research Reports**

Topics for student research reports include case studies of: (i) military engagements; (ii) instances of strategic intelligence, surprise, or deception, (iii) international (or other) crises, or (iv) other uses of coercive tactics, as well as (v) other instances of conflict and cooperation. Because it is covered in course readings and is the subject of the Take-Home Midterm Assignment, the 1962 Cuban Missile Crisis is not available for student reports.

Whatever the topic, your presentation and paper should not be merely a narrative of events but an analysis that is informed by the kinds of game-theoretical and strategic concepts introduced in POLI 388 class discussions and readings, using the following general template.

- (1) Identify the *players* or *actors* who are making strategic choices. (It is standard in most international relations theory to deem nations to be unitary actors making strategic choices.)
- (2) Identify the *goals* or *payoffs* or the players.
- (3) Characterize the nature of the *strategic interaction* between the players (This might best be done by devising, justifying, and analyzing a specific *payoff matrix*; constructing such a matrix is encouraged but not required.)
- (4) Identify opportunities for *communication* and strategic *intelligence* and/or *deception* between the players.
- (5) Identify to what extent the players are making choice *sequentially* and *openly* or are making choice *simultaneously* and/or *secretly*.
- (6) Identify the incentives and opportunities the players may have to make *credible commitments*, *threats*, or *promises*.
- (7) Consider to what extent this strategic interaction is a *one-shot* game or is part of more extended interaction in the manner of an *iterated* or *repeated* game.