Basic Information

Meeting Time  Wednesday, 1:20 pm to 3:15 pm
Meeting Place  Grainger 1070
My Office  322c North Hall
My Phone  608-263-2024
My Email  kydd@wisc.edu
Office Hours  Tuesday 1:30 pm to 3:00 pm or by appointment

Topic

The purpose of this course is to survey applications of game theory to international relations and further develop students’ game theoretic modeling skills. Students should have some familiarity with both game theory and international relations theory. We will cover cooperation, bargaining, the origins and termination of war, communication, multilateral politics, and the impact of domestic politics on international relations.

Requirements

Students will be required to complete a research paper for the course. The paper should take a problem of interest to the student and develop a model
of it. A good ideal to strive for is the kind of model paper found in *International Organization*, where the problem is well defined and grounded in the empirical and non-formal literature and the model is relatively simple and used to provide theoretical and substantive insights. The finished result can form the basis for a dissertation chapter or a stand alone article.

Students will turn in two preliminary items and then the final paper.

- First is a research proposal which will include a statement of the topic and question to be addressed, along with a brief literature review. This will eventually become the introduction to the paper. This will be due March 12 at noon.

- Second is the set up of the model. This will include the enumeration of players, description of the game tree or strategy space, utility functions for the players and information structure of the game. This will be due April 16 at noon.

- Third is the final paper. This will solve the model and discuss the results. This will be due May 14th at noon. Length is not crucial, but shoot for 8–10 thousand words.

The proposal and model setup may be resubmitted once after responding to my comments.

All written material must have a title page resembling that usually found on an article manuscript to be circulated at a conference. It must have your name, university affiliation, course identification, date, and a title that informs the reader of both the topic and what stage it is, for instance; Paper Proposal, Model Setup or Final Draft. The body must be double spaced with page numbers and citations using the author date system with a reference list at the back in the APSA style. Papers must be submitted via email, by noon on the date due. The file name must be your last name, followed by a 1 for the proposal, 2 for the model set up and 3 for the final paper. For instance, Smith’s model setup would be smith2.pdf. Use of LaTeX is encouraged but optional.

In addition there are problems at the end of Chapters 2-11. Each problem set must be turned in in class the week after the material is covered in class.

The grade will be determined as follows.
Grading Scheme

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem Sets</td>
<td>30%</td>
</tr>
<tr>
<td>Paper Proposal</td>
<td>10%</td>
</tr>
<tr>
<td>Model Setup</td>
<td>20%</td>
</tr>
<tr>
<td>Final Paper</td>
<td>40%</td>
</tr>
</tbody>
</table>

Readings

The lectures will be based on chapters from my textbook draft.

- Andrew H. Kydd. *International Relations Theory: The Rationalist Approach*. Cambridge University Press, 201?

Hereinafter this will be referred to as Kydd, *IRT*.

In addition, for each week I list some readings that are a mixture of earlier material that you should have already read or should read now to catch up, and later material on the topic of the week. I strongly recommend that you read some of this literature each week, but don’t assign specific articles as required because each of you will have different ones that you have already read and different interests you want to pursue. After covering the lecture material we can discuss the readings if desired.

The last three class sessions are listed as to be arranged. We can select topics and specific readings for these weeks as interest dictates. At the end of the schedule I list additional topics and readings that we can choose from, but suggestions are welcome.

Helpful textbooks on game theory include


Some other readings may be useful to help familiarize yourself with the approach and debates surrounding it.

• Robert Powell. *In the Shadow of Power*. Princeton University Press, Princeton, 1999, is an exemplary application of game theory to international security questions, primarily relating to bargaining and war.

• In 1999 *International Security* published a forum on game theory in security studies.
  
  
  
  
  
  
  


• Ten years earlier, *World Politics* published a symposium on rational deterrence theory.
  


Schedule

Week 1 (January 22) Organizational Meeting

Week 2 (January 29) Introduction

- Kydd, IRT, Chapter 1.

Additional Readings


Week 3 (February 5) What States Want

- Kydd, IRT, Chapter 2.

Additional Readings


Week 4 (February 12) Varieties of Strategic Settings

• Kydd *IRT*, Chapter 3.

Additional Readings


Week 5 (February 19) Bargaining

• Kydd *IRT*, Chapter 4.

Additional Readings


Week 6 (February 26) Preventive War

• Kydd *IRT*, Chapter 5.

Additional Readings

• James D. Fearon. Bargaining over objects that influence future bargaining power. 1996


• Muhammet A. Bas and Andrew J. Coe. Arms diffusion and war. 
  *Journal of Conflict Resolution*, 56(4):651–674, August 2012

**Week 7 (March 5) Private Information and War**

- Kydd *IRT*, Chapter 6.

**Additional Readings**


**Week 8 (March 12) Arms Competition and War**

- Kydd *IRT* Chapter 7.

**Additional Readings**


Week 9 (March 19) Spring Break

Week 10 (March 26) Cooperation Theory

- Kydd *IRT*, Chapter 8.

Additional Readings


Week 11 (April 2) Diplomacy and Signaling

• Kydd *IRT*, Chapter 9.

Additional Readings


• Avidit R. Acharya and Kristopher W. Ramsay. The calculus of the security dilemma. 2011

**Week 12 (April 9) Multilateral Politics**

• Kydd *IRT*, Chapter 10.

**Additional Readings**


Week 13 (April 16) Domestic Politics and International Relations

• Kydd *IRT*, Chapter 11.

Additional Readings


Week 14 (April 23) Topics (TBA)

Week 15 (April 30) Topics (TBA)

Week 16 (May 7) Topics (TBA)
Additional Topics

1. War Termination

- James D. Fearon. Fighting rather than bargaining

2. Alliances and the Balance of Power
3. Democracy and War


4. Audience Costs


5. Mediation and Intervention


6. Empirical Implications of Theoretical Models


7. Reputation


8. International Institutions


• Fey, Jo and Kenkel Critique of Chapman 07.


References


[47] Jack Hirshleifer. From weakest link to best shot: The voluntary provi-

[48] Keisuke Iida. Analytic uncertainty and international cooperation: The-
ory and application to international economic policy coordination. *In-

[49] Keisuke Iida. When and how do domestic constraints matter? un-


to the outbreak of war? *Journal of Conflict Resolution*, 28(1):63–84,
1984.

[52] Matthew O. Jackson and Massimo Morelli. Strategic militarization,
313, 2009.

[53] Robert Jervis. Cooperation under the security dilemma. *World Poli-


[55] Barbara Koremenos. Loosening the ties that bind: A learning model of

[56] Barbara Koremenos. Contracting around international uncertainty.

[57] Barbara Koremenos, Charles Lipson, and Duncan Snidal. The rational

[58] David M. Kreps and Robert Wilson. Reputation and imperfect infor-


