Course Description

This course is intended for graduate students who are interested in the formal analysis of international relations. The goal of the course is to familiarize students with the use of game theoretic techniques to develop theories to explain political phenomena in the international arena. In this course, students will (1) derive or prove results presented by the various authors, (2) identify ways to improve upon previous research, and (3) develop the skills necessary to develop their own game theoretic models. This course is not meant to be a survey of the formal literature in international relations. Instead, we will look at a limited number of representative readings that will allow you to learn about how formal models are used to construct theories of international relations.

This course concentrates on formal IR research, and we will spend much of our time working through game theoretic models. While we will spend the first session reviewing the basic concepts of game theory, it would be beneficial if students have already taken a course in game theory (e.g., POLI 789).

Requirements

Participation (10%): Students are expected to complete the assigned reading each week according to the topic covered. Discussion of the readings and models will occur in class.

Presentations (30%): For most class sessions, one student will be responsible for presenting and critiquing the assigned article. The presenter should prepare a short handout (~3 pages) that will be distributed to the class. This handout should consist of (i) a summary of the article's main points, (ii) an explanation of the main proofs and the intuition behind them, (iii) an evaluation of the substantive importance of the contribution, and (iv) a critique of the paper. The presenter should post the handout on the Sakai website by Wednesday night before class. Everyone will be expected to have read the article and the summary before coming to class. Presenters must be prepared to lead an in-class discussion of the article.

Referee Report (20%): Students will write a formal referee report on a published article in international relations that includes a game theoretic model. I will provide more information on the requirements for this assignment later. The referee report will be due March 2.

Research Paper (40%): Students will also be expected to complete a research paper in which they develop their own original game theoretic model to examine a question of interest in international relations. We will have an in-class workshop on April 6 for students to get feedback on their models. I will provide more information on the requirements of the research paper (and workshop presentations) at a later date. The research paper will be due on May 4.
Schedule of Readings

INTRODUCTION

January 12 – Introduction and Overview of Game Theory

Recommended Readings on the Use of Formal Models in IR


INTERSTATE CONFLICT

January 19


January 26


February 2


February 9


THIRD PARTY DYNAMICS

February 16

February 23 – ISA (No Class)

March 2


- *Referee Reports Due*

March 9


March 16 – Spring Break (No class)

March 23


March 30


April 6

- *In-Class Workshop: Student Models*

**INTRASTATE CONFLICT**

April 13


April 20


April 27


May 4

- *Research Papers Due*