The last fifteen years or so saw a major revolution in the social sciences. Instead of trying to discover and test grand “covering laws” that have universal validity and tremendous scope—think Newton’s gravity or Einstein’s relativity—the social sciences are in the process of switching to more narrow and middle-range theories and explanations, often referred to as causal mechanisms. Recently, however, a new so-called “behavioral” approach – often but not always complementary – is currently sweeping the field. Since mechanisms remain the core theoretical building blocks in our field, we will continue to focus on them.

In the bulk of this course students will be introduced to a range of such causal mechanisms with applications in international relations. Although these causal mechanisms can loosely be described in prose, explicit formalization – e.g., math – allows for a much deeper and richer understanding of the phenomena of study. In other words, formalization enables simplification and thus a better understanding of what is “really” going on. To set us on that path, we begin with some very basic rational choice fundamentals to introduce you to formal models in a rigorous way to show the power and potential of this approach. In other words, there will be some *gasp* Algebra. For much of the very brief but essential introduction to game theory we will use William Spaniel’s Channel (http://gametheory101.com/courses/game-theory-101/, also on YouTube), as well as his cheap but very highly rated introductory book Game Theory 101: The Complete Textbook available at Amazon (http://www.amazon.com). Will is a graduate from our Ph.D. program, currently a post-doctoral fellow at Stanford and he will be an Assistant Professor at the University of Pittsburgh next fall. During the rest of the semester we examine specific and ubiquitous mechanisms and see how it has been applied in international political economy and/or security studies. We will explore several substantive themes, such as the “democratic peace,” ethnic conflict and international trade to illustrate the mechanisms and cumulative potential of this research approach.

**Course Requirements** Students are of course required to read all the material; be ready to summarize each paper in a cogent paragraph or two; and participate in class discussion. Participation in the seminar comprises a third of your grade. Participation includes participation in class discussions, as well as one class presentation. In this class presentation, you are to present and describe one of the mechanisms we discuss in class with an example of your own. This example can be from a newspaper reading you did, from a book, from family history, from your personal life, from anything. But it must be a real example. The presenter must send a 1 page (at most) summary of the presentation to me by email, which must arrive no later than 8 PM, the day before the presentation is due.
A midterm exam counts for another third of your grade, and a final exam counts for the final a third of your grade. The final exam is given during the period scheduled by the University. In particular instances, students may substitute a serious research paper for the final. Students interested in the research paper option should approach me no later than one week after the mid-term.

For those enrolled in the W section, you must provide me with a one page statement of your proposed paper no later than one week after the mid-term. Failure to do so will be penalized. The research proposal must clearly state the central question, the proposed central answer, and potential competing explanations.

**Academic Integrity**

Be familiar with the University’s policies on academic integrity and disciplinary action ([http://www.rochester.edu/living/urhere/handbook/discipline2.html#XII](http://www.rochester.edu/living/urhere/handbook/discipline2.html#XII)). Violators of University regulations on academic integrity will be dealt with severely, which means that your grade will suffer, and I will forward your case to the Chair of the College Board on Academic Honesty, on which I have served.

**Texts**

I will provide a hand-out with the typed up lecture notes, currently about 90 pages two weeks before the Mid-term, and two weeks before the Final.

The following books are required reading:


Readings not included in one of the texts can be found through one of the online databases or on the library’s course web page, or there will be photocopies made available in the graduate lounge on the third floor, in a mail box under PSC 270. These readings are listed in the syllabus in italics. In addition, I expect students to read one of the following newspapers: the *New York Times*, the *Washington Post*, or the *Financial Times*, the *Frankfurter Allgemeine, Die Zeit, Le Monde diplomatique, BBC News* or a comparable international news provider.
Wednesday January 13

1. INTRODUCTION

Wednesday January 20

2. Thinking Strategically

   • William Spaniel, from Game Theory 101 MOOC, lesson #1: Introduction. From his book ....

Wednesday January 27

3. Causal Mechanisms

   • Elster, Nuts and Bolts for the Social Sciences, Parts 1–3, pp. 3–171.

Wednesday February 3

4. The Prisoner’s Dilemma

5. Coordination


Wednesday February 17

6. Coordination; Tipping Models


 optional


Wednesday February 24

7. Commitment Problems

Wednesday March 2

8. **Mid Term Exam**

Wednesday March 9

9. **No Class: Spring Recess**

Wednesday March 16

10. **Most likely no Class: Goemans in Santiago, Chile. We will schedule make up class.**

Wednesday March 23

**Students who are writing a paper for this class must hand in their one page proposal on this day.**

11. **Bargaining**


Wednesday March 30

12. **Class will be rescheduled: Goemans in San Diego. We will schedule make up class.**

Wednesday April 6

13. **Signalling (Tying Hands, Sinking Costs)**

14. Principal-Agent Models


15. Reputation


16. Psychological Mechanisms

Questions to consider in formulating and evaluating social science research

1. **What is the central question?**
   - Why is it important (theoretically, substantively)?
   - What is being explained (what is the dependent variable and how does it vary)?
   - How does this phenomenon present a puzzle?

2. **What is the central answer?**
   - What is doing the explaining (what are the independent variables and how do they vary)?
   - What are the hypotheses, i.e., what is the relationship between independent and dependent variables, what kind of change in the independent variable causes what kind of change in the dependent variable?
   - What are the causal mechanisms, i.e., why are the independent and dependent variables so related?
   - How do the independent variables relate to each other?
   - What assumptions does your theory make?
   - Is the theory falsifiable in concept?
   - What does this explanation add to our understanding of the question?

3. **What are the possible alternative explanations?**
   - What assumptions are you making about the direction of causality?
   - What other explanations might there be for the phenomenon of study, and to what degree do they conflict with the central answer?
   - Could the hypothesized relationships have occurred by chance?

4. **Why are the possible alternative explanations wrong?**
   - What is the logical structure of the alternative explanations (compare 2)?
   - What is the empirical evidence?

5. **What is the relationship between the theory and the evidence?**
   - What does the research design allow to vary, i.e., in this design are the explanations variables or constants?
   - What does your research design hold constant, i.e., does it help to rule out the alternative competing explanations?
   - How are the theoretical constructs represented empirically, i.e., how do you know it when you see it (measurement)?

6. **How do the empirical conclusions relate to the theory?**
   - How confident are you about the theory in light of the evidence?
   - How widely do the conclusions generalize, i.e., what might be the limitations of the study?
   - What does the provisionally accepted or revised theory say about questions of broader importance?