# PL SC 410: Strategy and Politics

## **Course Information**

Class Time: Tuesday, Thursday 1.35-2.50

Place: 208 Chambers Building Course Website: Canvas

#### **Contact Information for Professor**

Name: Matt Golder

Homepage: http://mattgolder.com/

E-mail: mgolder@psu.edu (preferred method of contact)

Office Hours: Thursdays 11.00-12.00 (On Zoom) - https://psu.zoom.us/j/93019754749

# **Contact Information for Teaching Assistant**

Name: Nguyen Huynh

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Office: 214 Pond Lab

Office Hours: Mondays 2.00-3.00 (On Zoom) – https://psu.zoom.us/j/98790921539

# **Course Description**

Strategic behavior is central to politics. It is common for political outcomes to be determined by the interaction of individuals seeking goals in an environment in which goal attainment is complicated by the choices of other actors. This course introduces various methods for analyzing strategic behavior. We will employ these methods to better understand a wide range of political phenomena in international politics, comparative politics, and American politics, such as war, terrorism, voting, electoral competition, government formation, and democratic transitions. The course covers the basics of social choice theory and game theory. By the end of the course, students will, among other things, have experience calculating expected utilities, solving complete information games in strategic and extensive form, solving repeated games, solving simple games with incomplete information, and evaluating multi-dimensional spatial models in the context of important substantive political questions. The course assumes no prior knowledge of social choice theory or game theory; a very basic understanding of high school algebra is the only mathematical prerequisite.

## **Course Requirements**

Attendance: Attendance in class is both recommended and required. You will find it *extremely* difficult to pass this class if you do not attend regularly. If you do miss class, you are expected to get notes from a fellow student; private make-up lectures with the professor or teaching assistant will not take place.

*Readings:* It is assumed that students will do all of the assigned readings before coming to class. You should come to class prepared to participate in discussions. You are encouraged to volunteer questions and observations; I will call on students at random with questions from time to time.

*Problem Sets:* Problem sets will be an important component of this class and will occur on an almost weekly basis. The emphasis on problem sets comes from the belief that there is a lot of art in science and one learns an art by doing, not simply by watching others do. Developing a command over analytical materials and building a capacity to engage in analysis require practice and repetition, and the problem sets are meant to provide such opportunities for students. In the interests of fairness, problem sets that are handed in late will not be graded. Completed problem sets will usually be handed in during class on the scheduled day.

*Exams:* There will be three exams – two midterms and a final. Exam makeups will only be possible in the most extenuating of circumstances. If you are ill or have a university-accepted excuse for missing an exam, please notify me *prior* to the test date. I will only consider your request if you make it prior to the exam. Material covered on the exams will come from lectures, the assigned readings, and the problem sets.

*In-Class Quizzes:* There may be occasional in-class quizzes that can provide additional points to your overall grade.

## **Required Text/Materials**

There are no required texts. All readings will be made available on Canvas.

## **Grading:**

Your final grade is a weighted average of the three exams, problem sets, and your attendance: Midterms 1 and 2 are *each* worth 20%; the final is worth 30%; the problem sets are worth 20%; and attendance is worth 10%. Additional points may be earned from in-class quizzes. I will use the following scale to calculate your course grade:

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A 93-100 C+ 77-79.9

A- 90-92.9 C 70-76.9

B+ 87-89.9 D 60-69.9

B 83-86.9 F 59.9 and below

B- 80-82.9
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#### **Exam Dates**

• Midterm 1: Thursday, February 10.

• Midterm 2: Thursday, March 31.

• Final Exam: TBD.

# **Covid/Masking/Eating Etiquette**

• Penn State University requires everyone to wear a face mask in all university buildings, including classrooms, regardless of vaccination status. ALL STUDENTS MUST wear a mask appropriately (i.e., covering both your mouth and nose) while you are indoors on campus. This is to protect your health and safety as well as the health and safety of your classmates, instructor, and the university community. Anyone attending class without a mask will be asked to put one on or leave. Instructors may end class if anyone present refuses to appropriately wear a mask for the duration of class. Students who refuse to wear masks appropriately may face disciplinary action for Code of Conduct violations. If you feel you cannot wear a mask during class, please speak with your adviser immediately about your options for altering your schedule. Eating in classrooms remains prohibited according to Policy AD62 Use of General Purpose Classrooms.

#### How do I succeed?

- Attendance in class is both required and highly recommended. Attendance at lectures is always a good predictor of a student's performance on problem sets and exams. You will find it extremely difficult to pass and do well in this class if you do not attend regularly.
- You should do all of the assigned readings prior to coming to class. If you have questions about the readings, you should bring them to class or office hours.
- The problem sets are very important and allow you to know if you are prepared for the exams or not. If you do not understand the problem sets, either before or after they are completed, you should come to office hours.
- You should come to office hours regularly. This is a vastly underused resource that is available to you. *It is OK to ask for help*. Attendance at office hours does not mean that you are not smart; it simply means that you care enough about your performance to use the resources available to you.

## **Academic Integrity**

Academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner. Academic integrity is a basic guiding principle for all academic activity at The Pennsylvania State University, and all members of the University community are expected to act in accordance with this principle. Consistent with this expectation, the University's Code of Conduct states that all students should act with personal integrity,

respect other students' dignity, rights and property, and help create and maintain an environment in which all can succeed through the fruits of their efforts.

Academic integrity includes a commitment by all members of the University community not to engage in or tolerate acts of falsification, misrepresentation, or deception. Such acts of dishonesty violate the fundamental ethical principles of the University community and compromise the worth of work completed by others.

Students with questions about academic integrity should visit http://www.la.psu.edu/ and then click on "Academic Integrity."

Penn State defines academic integrity as "the pursuit of scholarly activity in an open, honest and responsible manner" (Senate Policy 49-20). Dishonesty of any kind will not be tolerated in this course. Dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without permission from the instructor, or tampering with the academic work of other students. Students facing allegations of academic misconduct should not drop the course; those who do will be added to the course again and will be expected to complete course work and meet course deadlines. If the allegations are dismissed, then the drop will be permitted. Students found responsible for academic misconduct often receive academic sanctions, which can be severe, and put themselves at risk for disciplinary sanctions assigned by the University's Office of Student Conduct (see Senate Policy G-9).

# **Counseling and Psychological Services**

Many students at Penn State face personal challenges or have psychological needs that may interfere with their academic progress, social development, or emotional wellbeing. The university offers a variety of confidential services to help you through difficult times, including individual and group counseling, crisis intervention, consultations, online chats, and mental health screenings. These services are provided by staff who welcome all students and embrace a philosophy respectful of clients' cultural and religious backgrounds, and sensitive to differences in race, ability, gender identity, and sexual orientation.

Counseling and Psychological Services at University Park (CAPS) (http://studentaffairs.psu.edu/counseling/): 814-863-0395

Counseling and Psychological Services at Commonwealth Campuses (http://senate.psu.edu/faculty/counseling-services-at-commonwealth-campuses/)

Penn State Crisis Line (24 hours/7 days/week): 877-229-6400 Crisis Text Line (24 hours/7 days/week): Text LIONS to 741741

## **Disabilities**

Penn State welcomes students with disabilities into the University's educational programs. Every Penn State campus has an office for students with disabilities. Student Disability Resources (SDR) website provides

contact information for every Penn State campus (http://equity.psu.edu/sdr/disability-coordinator). For further information, please visit the Student Disability Resources website (http://equity.psu.edu/sdr/).

In order to receive consideration for reasonable accommodations, you must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: See documentation guidelines at (http://equity.psu.edu/sdr/guidelines). If the documentation supports your request for reasonable accommodations, your campus disability services office will provide you with an accommodation letter. Please share this letter with your instructors and discuss the accommodations with them as early as possible. You must follow this process for every semester that you request accommodations.

## **Long Term Absences**

During your enrollment at Penn State, unforeseen challenges may arise. If you ever need to miss an extended amount of class in such a circumstance, please notify your professor so you can determine the best course of action to make up missed work. If your situation rises to a level of difficulty you cannot manage on your own with faculty support, reach out to the Student Care & Advocacy office by phone at (814-863-2020) or email them at StudentCare@psu.edu.

# **Educational Equity/Report Bias Statements**

Penn State takes great pride to foster a diverse and inclusive environment for students, faculty, and staff. Consistent with University Policy AD29, students who believe they have experienced or observed a hate crime, an act of intolerance, discrimination, or harassment that occurs at Penn State are urged to report these incidents as outlined on the University's Report Bias webpage (http://equity.psu.edu/reportbias/).

## **Tentative Schedule**

This schedule should be treated as tentative and flexible. It may be the case that it takes us more or less time for a particular topic than I have allotted here. We will adapt accordingly. Note, however, that I will not alter the exam dates.

Week 1: January 10-14 – What is science? Role of theory. Logical fallacies. Building models.

Clark, William, Matt Golder, & Sona Golder. 2017. *Principles of Comparative Politics*. Washington D.C.: CQ Press. Ch. 2.

Shepsle, Kenneth A. 2010. *Analyzing Politics: Rationality, Behavior, and Institutions*. New York: W. W. Norton. pp. 3-12.

Lave, Charles A. & James G. March. 1975. *An Introduction to Models in the Social Sciences*. New York: Harper & Row. pp. 1-84.

Week 2: January 17 - 21 – Rational choice. Rationality, utility, expected utility, and risk. Applications: (i) the role of power and motivation in conflict, (ii) war and bargaining, and (iii) turnout.

Shepsle, Kenneth A. 2010. *Analyzing Politics: Rationality, Behavior, and Institutions*. New York: W. W. Norton. pp. 13-37.

Bueno de Mesquita, Bruce. 2006. Principles of International Politics: People's Power, Preferences, and Perceptions. Washington D.C.: CQ Press. 284-296.

Fearon, James. 1995. "Rationalist Explanations for War." International Organization 49: 379-414.

Weeks 3-5: January 24 - February 11 – Strategic games and Nash equilibria. Best response functions, pareto optimality, dominated actions. Applications: (i) contractarian and predatory views of the state, (ii) turnout, (iii) counterterrorism, (iv) electoral competition, (v) war of attrition.

Clark, William, Matt Golder, & Sona Golder. 2017. *Principles of Comparative Politics*. Washington D.C.: CQ Press. Ch. 4.

Shepsle, Kenneth A. 2010. *Analyzing Politics: Rationality, Behavior, and Institutions*. New York: W. W. Norton. pp. 231-261.

Morton, Rebecca. 2006. Analyzing Elections. New York: W. W. Norton. pp. 24-45.

Arce M., Daniel G. & Todd Sandler. 2005. "Counterterrorism: A Game-Theoretic Analysis." *Journal of Conflict Resolution* 49: 183-200.

#### Midterm 1 (Thursday, February 10)

Week 6: February 14-18 – Mixed strategy Nash equilibria.

Dixit, Avinash, Susan Skeath, & David H. Reiley, Jr. 2009. *Games of Strategy*. New York: W. W. Norton & Company. pp. 213-261.

Bueno de Mesquita, Bruce. 2006. *Principles of International Politics: People's Power, Preferences, and Perceptions*. Washington D.C.: CQ Press. 269-279.

Weeks 7-9: February 21 - March 18 – Extensive form games, Nash equilibria, and subgame perfect Nash equilibria. Backward induction. Credible threats. Combining extensive form and strategic form games. Chance moves. Applications: (i) ultimatum and dictatorship games, experiments, and culture, (ii) exit, voice, and loyalty, (iii) culture and democracy, (iv) and principal-agent models.

Bueno de Mesquita, Bruce. 2006. *Principles of International Politics: People's Power, Preferences, and Perceptions*. Washington D.C.: CQ Press. pp. 162-170.

Clark, William, Matt Golder, & Sona Golder. 2017. "An Exit, Voice, and Loyalty Model of Politics. *British Journal of Political Science* 47: 719-748.

Henrich, Joseph et al. 2005. "Economic Man' in Cross-Cultural Perspective: Behavioral Experiments in 15 Small-Scale Societies." *Behavioral and Brain Sciences* 28: 795-815.

## March 6-12: Spring Break – No Classes

Week 10: March 21-25 – Social choice theory. Condorcet's paradox, Arrow's theorem, median voter theorem, chaos theorem.

Clark, William, Matt Golder, & Sona Golder. 2017. *Principles of Comparative Politics*. Washington D.C.: CQ Press. Ch. 11.

Week 11: March 28 - April 1 – More spatial models. Applications: (i) veto player theory, (ii) government formation, and (iii) courts.

Shepsle, Kenneth A. 2010. *Analyzing Politics: Rationality, Behavior, and Institutions*. New York: W. W. Norton. pp. 423-432, 473-529.

Clark, William, Matt Golder, & Sona Golder. 2017. *Principles of Comparative Politics*. Washington D.C.: CQ Press. Ch. 15, read just pp. 679-689.

# Midterm 2 (Thursday, March 31)

Week 12: April 4-8 – Selectorate theory. Applications: (i) government performance, (ii) institutional choice, (iii) democratic peace, (iv) foreign aid, and (v) nation building.

Bueno de Mesquita, Bruce. 2006. Principles of International Politics: People's Power, Preferences, and Perceptions. Washington D.C.: CQ Press. 413-446.

Weeks 13-15: April 11 - 29 – Incomplete information games. Beliefs and Bayesian updating. Applications: (i) democratic transitions, (ii) trade sanctions, (iii) deterrence, (iv) terrorism, (v) religious parties and democracy, (vi) coups, dictatorships, and parties.

Bueno de Mesquita, Bruce. 2006. *Principles of International Politics: People's Power, Preferences, and Perceptions*. Washington D.C.: CQ Press. 343-412.

Clark, William, Matt Golder, & Sona Golder. 2017. *Principles of Comparative Politics*. Washington D.C.: CQ Press. Ch. 8.

Final Exam (TBA)