

POL 4810

The Politics of Nuclear Weapons

Time: Tuesday and Thursday, 9.45–11.00am
Room: Blegen 235

Instructor: Mark S. Bell
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COURSE DESCRIPTION

How do nuclear weapons affect international politics? How likely is nuclear war or nuclear terrorism? How dangerous is nuclear proliferation? Is nuclear disarmament possible? Is it desirable? This course examines these questions.

The course is organized loosely into three sections. In the first section, students are introduced to the major theories used to understand nuclear weapons. They will be exposed to the technological underpinnings of nuclear materials, nuclear weapons, and their effects; the classic theory of the nuclear revolution and more recent criticisms of it; deterrence theory; theories of escalation and nuclear strategy; and theories of why and how countries seek nuclear weapons. The goal of this section is to give students the technical and conceptual tools needed to understand nuclear weapons and the way they have affected international politics.

The second section introduces students to the history of the nuclear age. Major historical episodes and the political, strategic, and ethical debates surrounding them will be discussed. For example, the course will cover the Manhattan Project and bombings of Hiroshima and Nagasaki; the evolution of nuclear strategy and the arms race between the Soviet Union and the United States; the proliferation of nuclear weapons to regional powers and the development of the global non-proliferation regime; nuclear crises including the Cuban Missile Crisis, the Suez Crisis, and Able Archer; and the history of arms control and detente. The goal of this section of the course is to give students a solid empirical understanding of the nuclear age that will enable them to evaluate, use, and understand the limitations of the theories and concepts introduced in the first third of the course.

The third section considers a range of contemporary issues, including nuclear terrorism; the role nuclear energy will (and should) play in the future, the feasibility of nuclear disarmament; the role of nuclear

weapons in future US-China relations; the role of nuclear weapons in South Asia; the Iran nuclear deal and potential future proliferation; and the ways in which current and future technological developments may impact nuclear issues. In this section of the course, we will use understanding of both history and theory to evaluate the importance and impact of these ongoing and future challenges.

Although the class is separated into these sections, this distinction is somewhat artificial. In examining the theories, we will discuss whether historical events seem to validate or disconfirm those theories. When we discuss historical events we will ask which theories seem to explain these events best. And when analyzing current policy issues we will ask what effects the different theories suggest that these technological developments will have.

COURSE PREREQUISITES

There are no formal prerequisites for the class, but students who have taken a previous class on international politics (for example, POL 1025: Global Politics, POL 1026: U.S. Foreign Policy, POL 3835: International Relations, POL 3810: International Law, or POL 4885: International Conflict and Security) will likely get the most out of the class. If you don't have any background of this sort, it would be advisable to speak with the TA or instructor before committing to take the class.

COURSE ASSIGNMENTS

Participation. Passive learning does not work. You will need to come to class having done the reading, ready to engage with the material, and prepared to share your thoughts. All students are expected to complete *all* the assigned readings before the seminar meetings, attend class, and participate. Participation will not only include attending and contributing in class, but also submitting short responses to the readings online in advance of classes (by 9.00am the day of class). You will be expected to submit at least one response every week during the semester (except the weeks in which the midterms or policy memo occurs). Expectations for the content of the responses will be discussed at the first class meeting. 20% of your grade will be based on participation.

Midterm. There will be an in-class midterm exam which will combine short ID questions with longer essay questions. More details will be provided nearer the time of the exam. The midterm will count for 25% of your final grade.

Policy Memo. Writing a concise memo under time constraints is an incredibly important skill in a wide range of careers. Two thirds of the way through the semester, you will be given one week to write a short policy memo to a US policymaker about a policy issue connected to the class. Expectations for the memo will be discussed at the first class meeting, and the class when the topic of the memo is revealed will include information on how to write an effective memo. The memo topic will be revealed on March 29, and the memo should be uploaded to the class moodle before class on April 10. 20% of your grade will be based on the memo.

Final Exam. There will be a final exam, which will have a similar format to the midterm exam. Again, more details will be provided nearer the time of the exam. The final exam will count for 35% of your final grade.

REQUIRED TEXTS

There are no required books for the class.

COURSE POLICIES

There will be no laptops in class. This is not because I'm a luddite, in fact exactly the opposite—it's because of science. Research shows that students take better notes by hand, learn more if they don't have their laptops open, and that using laptops negatively affects the learning outcomes of those sitting around you. If you have your laptop open, you will be considerably more likely to receive a question out of the blue from the instructor. If you have a medical or other legitimate need for a laptop in class, please let the instructor or TA know.

COURSE SCHEDULE

All course readings are available on the course Canvas website (log in with your UMN ID and password to view the page).

PART I: Theories of Nuclear Weapons

Class 1, January 16. Introduction and Overview of IR Theory

- Stephen M. Walt, "International Relations: One World, Many Theories," *Foreign Policy* no. 110, Spring 1998: 29–46.

Class 2, January 18. The Technology of Nuclear Weapons

- Matthew Bunn, How Nuclear Bombs Work, Part 1/2 (YouTube video, focus on part up to 48:23).

Class 3, January 23. Canceled due to weather

Class 4, January 25. The Theory of the Nuclear Revolution

- Kenneth N. Waltz, "More May Be Better," in Scott D. Sagan and Kenneth N. Waltz, *The Spread of Nuclear Weapons: A Debate Renewed* (2003): 3–45.
- Robert Jervis, "Why Nuclear Superiority Doesn't Matter," *Political Science Quarterly*, vol. 94, No. 4 (1979-1980): 617–633.

Class 5, January 30. Brinkmanship and the Stability-Instability Paradox.

- Thomas C. Schelling, *Arms and Influence* (New Haven, Yale University Press, 1966), Chapter 3: "The Manipulation of Risk" (pp. 92–125).
- Michael Krepon, "The Stability-Instability Paradox, Misperception, and Escalation Control in South Asia" (2005) pp. 1–3

Class 6, February 1. Nuclear Strategy

- Colin Gray and Keith Payne, "Victory is Possible," *Foreign Policy*, vol. 39 (1980), pp. 14–27
- Vipin Narang, "Posturing for Peace? Pakistan's Nuclear Postures and South Asian Security," *International Security*, vol. 34, no. 3 (Winter 2009-2010): 38–78.

Class 7, February 6. Criticisms of the Theory of the Nuclear Revolution

- Keir A. Lieber and Daryl G. Press, "The New Era of Counterforce: Technological Change and the Future of Nuclear Deterrence," *International Security*, vol. 41, no. 4 (2017): 9–49.
- Mark S. Bell, "Nuclear Opportunism: A Theory of How States Use Nuclear Weapons in International Politics," *Journal of Strategic Studies*, 2017.

Class 8, February 8. Norms and Taboos

- Nina Tannenwald, "The Nuclear Taboo: The United States and the Normative Basis of Nuclear Non-Use," *International Organization*, vol. 53, no. 3 (Summer 1999), pp. 433–468.
- Daryl Press, Scott Sagan, and Ben Valentino, "Atomic Aversion: Experimental Evidence on Taboos, Traditions, and the Non-Use of Nuclear Weapons," *American Political Science Review*, vol. 107, no. 1 (2013): 188–206.
- Carol Cohn, "The Perils of Mixing Masculinity and Missiles," *New York Times*, Jan 5, 2018

Class 9, February 13. Bureaucratic and Organizational Politics

- Scott D. Sagan, "The Perils of Proliferation: Organization Theory, Deterrence Theory, and the Spread of Nuclear Weapons," *International Security*, vol. 18, no. 4 (1994): 66–107.
- Jacques E.C. Hymans, "Veto Players, Nuclear Energy, and Nonproliferation," *International Security*, vol. 36, no. 2 (Fall 2011): 154–189.

Class 10, February 15. Theories of Proliferation

- Scott D. Sagan, "Why Do States Build Nuclear Weapons? Three Models in Search of a Bomb," *International Security*, vol. 21, no. 3 (1996-1997): 54–86.
- Jacques E.C. Hymans, "Isotopes and Identity: Australia and the Nuclear Weapons Option, 1949-1999," *Nonproliferation Review*, vol. 7, no. 1 (2000): 1–23.
- Matthew Fuhrmann, "Spreading Temptation: Proliferation and Peaceful Nuclear Cooperation Agreements," *International Security*, vol. 34, no. 1 (2009): 7–41.

PART II: THE NUCLEAR AGE

Class 11, February 20. Robert Oppenheimer and The Manhattan Project (guest lecture by Michel Janssen)

- Jeremy Bernstein, *Oppenheimer: Portrait of an Enigma* (Chicago, IL: Ivan R. Dee, 2005), 65–169.

Class 12, February 22. Hiroshima and Nagasaki

- Richard Rhodes, *The Making of the Atomic Bomb* (New York, N.Y.: Simon and Schuster): Chapter 19.
- Ward Wilson, "The Winning Weapon? Rethinking Nuclear Weapons in Light of Hiroshima," *International Security*, vol. 31, no. 4 (2007): 162–179.
- Gar Alperovitz. "Hiroshima: Historians Reassess," *Foreign Policy*, vol. 99 (1995): 15–34.
- Note: During class, we will watch the short film "Hiroshima/Nagasaki August 1945," which contains harrowing footage of the effects of nuclear weapons. If you have any concerns about this, please contact the instructor or TA so that arrangements can be made.

Class 13, February 27. Cold War Nuclear Crises

- Marc Trachtenberg, "The Influence of Nuclear Weapons in the Cuban Missile Crisis," *International Security*, vol. 10, no. 1 (1985): 137–163.
- Rosemary Foot, "Nuclear Coercion and the Ending of the Korean Conflict," *International Security* vol. 13, no. 3 (1988–1989): 92–112.

Class 14, March 1. The NPT and Arms Control

- "Treaty on the Non-Proliferation of Nuclear Weapons"
- George Bunn, *Arms Control by Committee: Managing Negotiations with the Russians*, (Stanford University Press, 1992): Chapter 4.
- Andrew J. Coe and Jane Vaynman, "Superpower Collusion and the Nuclear Nonproliferation Treaty," *Journal of Politics*, vol. 77, no. 4 (2015): 983–997.

Class 15, March 6. Midterm Review

- No readings, come with questions!

Class 16, March 8. Midterm

- No readings

March 13 & March 15. No Class: Spring Break

Class 17, March 20. The Late Cold War

- Charles L. Glaser, "Why Even Good Defenses May Be Bad," *International Security*, vol. 9, no. 2 (1984): 92–123.
- Brendan Rittenhouse Green and Austin Long, "The MAD Who Wasn't There: Soviet Reactions to the Late Cold War Strategic Balance," *Security Studies*, vol. 26, no. 4 (2017): 606–641.

Class 18, March 22. U.S. Nuclear Strategy

- Scott D. Sagan, *Moving Targets* (Princeton: Princeton University Press, 1989), Chapter 1.
- Keir A. Lieber and Daryl G. Press, "The Rise of U.S. Nuclear Primacy," *Foreign Affairs*, vol. 85, no. 2 (March-April 2006), pp. 42–54.
- Scott D. Sagan, "The Case for No First Use," *Survival*, vol. 51, no. 3: 163–182.

Class 19, March 27. U.S. Nonproliferation Policy and Counterproliferation. POLICY MEMO TOPIC PROVIDED.

- Francis J. Gavin, "Strategies of Inhibition: US Grand Strategy, the Nuclear Revolution, and Nonproliferation", *International Security*, vol. 40, no. 1 (Summer 2015): 9–46.

- Nicholas L. Miller, "U.S. Nonproliferation Policy is an Invisible Success Story," *Washington Post* Monkey Cage blog, October 16, 2014.
- Jason Ellis, "The Best Defense: Counterproliferation and U.S. National Security," *Washington Quarterly*, vol. 26, no. 2 (2003): 115–133.

Class 20, March 29. NO CLASS: WORK ON YOUR MEMOS!

Class 21, April 3. Failed efforts: Iraq and Libya (guest lecture by Målfrid Braut-Hegghammer)

- Målfrid Braut-Hegghammer, "Revisiting Osirak: Preventive Attacks and Nuclear Proliferation Risks," *International Security*, vol. 36, no. 1 (2011): 101–132
- See canvas website for additional primary documents to read before class: 1) a meeting between Saddam and his advisors; 2) a 1981 public statement from Iraq; 3) a 1983 US government report on the Iraqi nuclear program

PART III: CONTEMPORARY ISSUES

Class 22, April 5. Nuclear Energy and Proliferation

- John P. Holdren, "Nuclear Power and Nuclear Weapons: The Connection is Dangerous," *Bulletin of the Atomic Scientists*, vol. 39, no. 1 (1983): 40–45.
- Bernard I. Spinrad, "Nuclear Power and Nuclear Weapons: The Connection is Tenuous," *Bulletin of the Atomic Scientists*, vol. 39, no. 2 (1983): 42–47.
- Nicholas L. Miller, "Why Nuclear Energy Rarely Leads to Proliferation," *International Security*, vol. 42, no. 2 (2017): 40–77.

Class 23, April 10. Nuclear Terrorism and Accidents. POLICY MEMO DUE

- Scott Sagan, "Nuclear Alerts and Crisis Management," *International Security*, vol. 9, no. 4 (1985): 99–139
- Matthew Bunn and Anthony Wier, "Seven Myths of Nuclear Terrorism," *Current History*, vol. 104, no. 681 (2005): 153–161.
- John Mueller, *Atomic Obsession: Nuclear Alarmism from Hiroshima to Al-Qaeda*, chapter 13.

Class 24, April 12. Nuclear Weapons in South Asia

- S. Paul Kapur, "India and Pakistan's Unstable Peace: Why Nuclear South Asia is Not Like Cold War Europe," *International Security* vol. 30, no. 2 (2005): 127–152.
- Sumit Ganguly, "Nuclear Stability in South Asia," *International Security* vol. 33, no. 2 (2008): 45–70.

Class 25, April 17. Iran (guest lecture by Colin Kahl)

- Barry R. Posen, "We Can Live With a Nuclear Iran," *New York Times*, February 27, 2006.
- Nicholas L. Miller and Or Rabinowitz, "Why the Iran Deal is a Logical Extension of U.S. Nonproliferation Policy," *Washington Post* Monkey Cage blog, April 21, 2015.
- Indira Lanshmanan, "'If you can't do this deal...go back to Tehran': The Inside Story of the Obama Administration's Iran Diplomacy," Politico EU, 26 September 2015.
- Mark Dubowitz, "Assessing the Iran Deal," Congressional Testimony, April 5, 2017.
- Colin Kahl, "The Myth of a 'Better' Iran Deal," *Foreign Policy*, September 26, 2017.

Class 26, April 19. North Korea

- Vipin Narang and Ankit Panda, "Welcome to the H-Bomb Club, North Korea," *War on the Rocks*, September 4, 2017.
- Van Jackson, "Threat Consensus and Rapprochement Failure: Revisiting the Collapse of US-North Korea Relations, 1994-2002," *Foreign Policy Analysis*, vol. 14, no. 2 (2018): 235-253 (only read pages 241-250).
- Vipin Narang, "Why Kim Jong Un Wouldn't Be Irrational to Use a Nuclear Bomb First," *Washington Post*, September 8, 2017.
- John Bolton, "The Legal Case for Striking North Korea First," *Wall Street Journal*, February 28, 2018.
- Scott Sagan and Allan Weiner, "Bolton's Illegal War Plan for North Korea," *New York Times*, April 6, 2018.
- Jeffrey Lewis, "The Word That Could Help the World Avoid Nuclear War," *New York Times*, April 4, 2018

Class 27, April 24. Nuclear Weapons and U.S.-China Relations

- Joshua Rovner, "AirSea Battle and Escalation Risks," U.C. Institute on Global Conflict and Cooperation Policy Brief, no. 12, January 2012.
- Caitlin Talmadge, "Assessing the Risk of Chinese Nuclear Escalation in a Conventional War with the United States," *International Security*, *International Security*, vol. 41, no. 4 (2017): 50-92.

Class 28, April 26. Nuclear Weapons and Cyber

- Erik Gartzke and Jon R. Lindsay, "Thermonuclear Cyberwar," *Journal of Cybersecurity*, vol. 3, no. 1 (2017): 37-48.
- Erik Gartzke and Jon R. Lindsay, "The U.S. Wants to Stop North Korean Missiles Before They Launch. That May Not Be A Great Idea," *Washington Post* Monkey Cage Blog, March 15, 2017.

Class 29, May 1. Nuclear Disarmament

- George Shultz, William Perry, Henry Kissinger, and Sam Nunn, "A World Free of Nuclear Weapons," *Wall Street Journal*, January 4, 2007.
- Ivo Daalder and Jan Lodal "The Logic of Zero: Toward a World Without Nuclear Weapons," *Foreign Affairs*, vol. 87, no. 6: 80–95.
- Thomas C. Schelling, "A World Without Nuclear Weapons?" *Daedalus*, vol. 138, no. 4 (2009): 124–129.
- Charles L. Glaser, "The Flawed Case for Nuclear Disarmament," *Survival*, vol. 40, no. 1 (1998): 112–128.

Class 30, May 3. The Future: Wrapping Up, Conclusions, Review for Final Exam

STANDARD STATEMENT ON COURSE REQUIREMENTS POLITICAL SCIENCE DEPARTMENT

Student Conduct Code:

The University seeks an environment that promotes academic achievement and integrity, that is protective of free inquiry, and that serves the educational mission of the University. Similarly, the University seeks a community that is free from violence, threats, and intimidation; that is respectful of the rights, opportunities, and welfare of students, faculty, staff, and guests of the University; and that does not threaten the physical or mental health or safety of members of the University community.

As a student at the University you are expected adhere to Board of Regents Policy: Student Conduct Code. To review the Student Conduct Code, please see [here](#).

Note that the conduct code specifically addresses disruptive classroom conduct, which means “engaging in behavior that substantially or repeatedly interrupts either the instructor’s ability to teach or student learning. The classroom extends to any setting where a student is engaged in work toward academic credit or satisfaction of program-based requirements or related activities.”

Use of Personal Electronic Devices in the Classroom:

The University establishes the right of each faculty member to determine if and how personal electronic devices are allowed to be used in the classroom. For complete information, please see [here](#).

Scholastic Dishonesty:

You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis. If it is determined that a student has cheated, he or she may be given an “F” or an “N” for the course, and may face additional sanctions from the University. For additional information, please see [here](#).

The Office for Student Conduct and Academic Integrity has compiled a useful list of Frequently Asked Questions pertaining to scholastic dishonesty [here](#). If you have additional questions, please clarify with your instructor for the course.

Makeup Work for Legitimate Absences:

Students will not be penalized for absence during the semester due to unavoidable or legitimate circumstances. For further details, please see [here](#).

Appropriate Student Use of Class Notes and Course Materials:

Taking notes is a means of recording information but more importantly of personally absorbing and integrating the educational experience. However, broadly disseminating class notes beyond the classroom community or accepting compensation for taking and distributing classroom notes undermines instructor

interests in their intellectual work product while not substantially furthering instructor and student interests in effective learning. Such actions violate shared norms and standards of the academic community. For additional information, please see [here](#).

Grading and Transcripts:

The University utilizes plus and minus grading on a 4.000 cumulative grade point scale. The two grading systems used are the ABCDF and S-N. Political science majors and minors must take POL courses on the ABCDF system. An S grade is the equivalent of a C- or better. Inquiries regarding grade changes should be directed to the course instructor. Extra work in an attempt to raise a grade can only be submitted with the instructor's approval. For additional information, please see [here](#).

Incompletes:

The instructor will specify the conditions, if any, under which an "Incomplete" will be assigned instead of a grade. No student has an automatic right to an incomplete. The instructor may set dates and conditions for makeup work.

Department of Political Science Policy: The instructor may set dates and conditions for makeup work using a "Completion of Incomplete Work" contract form. All work must be completed no later than one calendar year after the official last day of the class.

Sexual Harassment

"Sexual harassment" means unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct of a sexual nature. Such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working or academic environment in any University activity or program. Such behavior is not acceptable in the University setting. For additional information, please consult [Board of Regents Policy](#).

Equity, Diversity, Equal Opportunity, and Affirmative Action:

The University provides equal access to and opportunity in its programs and facilities, without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. For more information, please consult [Board of Regents Policy](#).

Disability Accommodations:

The University of Minnesota is committed to providing equitable access to learning opportunities for all students. The Disability Resource Center is the campus office that collaborates with students who have disabilities to provide and/or arrange reasonable accommodations. If you have, or think you may have, a disability (e.g., mental health, attentional, learning, chronic health, sensory, or physical), please contact DS at 612-626-1333 to arrange a confidential discussion regarding equitable access and reasonable accommodations.

If you are registered with DS and have a current letter requesting reasonable accommodations, please contact your instructor as early in the semester as possible to discuss how the accommodations will be applied in the course. For more information, please see the DS [website](#).

Mental Health and Stress Management:

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance and may reduce your ability to participate in daily activities. University of Minnesota services are available to assist you. You can learn more about the broad range of confidential mental health services available on campus via the Student Mental Health [website](#).

Academic Freedom and Responsibility:

Academic freedom is a cornerstone of the University. Within the scope and content of the course as defined by the instructor, it includes the freedom to discuss relevant matters in the classroom. Along with this freedom comes responsibility. Students are encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth. Students are free to take reasoned exception to the views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled.

Reports of concerns about academic freedom are taken seriously, and there are individuals and offices available for help. Contact the instructor, the Department Chair, your adviser, the associate dean of the college, or the Vice Provost for Faculty and Academic Affairs in the Office of the Provost.

Students are responsible for class attendance and all course requirements, including deadlines and examinations. The instructor will specify if class attendance is required or counted in the grade for the class.