



UNIVERSITY OF
CENTRAL FLORIDA

INR 4115: STRATEGIC WEAPONS AND ARMS CONTROL
SCHOOL OF POLITICS, SECURITY AND INTERNATIONAL AFFAIRS
UNIVERSITY OF CENTRAL FLORIDA
SPRING 2020

Instructor	Doreen Horschig
Credit Hours	3
Class Meeting	Tuesdays and Thursdays 9 AM – 10:20 AM
Class Location	PSY 0111
Office Location	Howard Phillips Hall 313
Office Hours	Thursdays 10:30 AM – 12:30 PM or by appointment
Email	Via the course page on Webcourses

COURSE DESCRIPTION

This course is intended to provide students with a basic understanding of the theoretical issues surrounding nuclear weapons, their historical development, and the impact they have had historically on global politics and in current policy debates. The course examines conceptual foundations, organizational structures and functions, decision making processes, and priority issues in military strategies with a special focus on the role of strategic weapons in the nuclear age.

Students will be exposed to the science and technology behind the weapons, the histories of the existing nine nuclear weapons states, and will build on the aforementioned technical and case knowledge to explore critical issues of nuclear strategy. Topics will include, but not be limited to, deterrence, compellence, nuclear use and non-use, and nuclear strategy. A significant amount of attention will also be paid to the theoretical debates, policy concerns, and historical evidence regarding the causes and consequences of nuclear proliferation. A significant amount of the course readings are drawn from both scholars and practitioners of international security and nuclear strategy.

This course is suitable for students with a general background in international affairs and some familiarity with military strategy and should be of interest to students seeking to improve their understanding of nuclear security and arms control, and of particular utility to students considering careers in national and international security. The course is conducted as part lecture and part interactive undergraduate seminar, and thoughtful and informed participation is required.

STUDENT LEARNING OUTCOMES

- Develop a basic understanding of the science and technology underlying nuclear weapons
- Integrate the theory and practice of nuclear weapons and nuclear strategy through examining historical debates and current policy arenas
- Encourage critical thinking about contemporary policy debates, including the ability to analyze key issues in U.S. nuclear policy and strategy and offer practical solutions
- Improve professional skills including critical thinking, clear and effective oral presentation, the use of simulations, and oral and written argumentation

COURSE REQUIREMENTS

To be successful in this course students will:

- Attend all class sessions
- Complete the assigned readings prior to class
- Complete three exams
- Contribute to class discussions constructively and consistently
- Keep informed of current events as they pertain to nuclear security (Students should also read at least one daily source of national and foreign news, looking in particular at nuclear security, such as *The New York Times*, *The Washington Post*, *The Financial Times*, or *The Wall Street Journal*.)

REQUIRED READINGS

There is no textbook purchase required for this class. Readings without a link on the course roadmap (see below) will be made available through webcourses@UCF.

GRADING FORMULA

Assignment	Due Date	✓
Academic Activity	1-10, by 11:59PM	
15% Exam 1	2-13, in-class	
15% Final Exam	4-23, in -class	
15% Short Papers (each 5%, 3/8)	Mondays at 11:59PM (see webcourses for specific dates)	
<i>Term Paper (40%)</i>		
10% Paper Proposal	3-2, 11:59 PM	
20% Final Paper	4-13, 11:59 PM	
10% Presentation & Feedback Form	Week 15	
15% Attendance, Participation, In-class quizzes (8/10)	Week 1-15	

- The following grade scale is applicable in this class: A: 100-94, A-: 93-90, B+: 89-87, B: 86-84, B-: 83-80, C+: 79-77, C: 76-74, C-: 73-70, D+: 69-67, D: 66-60, F: 59-0. Grades are rounded to the nearest integer (e.g., 79.4=79, 79.6=80).

1. EXAMS (30%)

There will be 2 in-class exams, none of which will be comprehensive. The exams will be multiple choice and short answer based on the assigned readings and class discussions. Study guides will be made available in advance.

2. SHORT PAPERS (15%)

To give students flexibility in their schedule, 8 short paper options are being made available throughout the semester (see syllabus). Each student must write at least 3 short papers but can receive extra credit for any 2 additional short papers. I will make additional readings for each short paper available on webcourses@UCF that are not listed on the syllabus. However, you can use outside readings as well. Each short paper should meet the following requirements:

- Make a clear argument addressing the question at hand but also mentioning alternative explanations
- Write no less than 500 and no more than 750 words
- Use a proper citations style (footnotes, endnotes, and bibliography do not count towards word limit)
- Use direct quotes sparingly
- Use at least 3 sources (they can come from the course readings, additional readings in

Webcourses, or external readings)

3. TERM PAPER (40%)

The final term paper should focus on a question related to nuclear issues in international politics and seek to explain the issue using the theories and concepts discussed in class and empirical evidence drawn both from class readings and outside research. The paper should:

- Be between 2000 and 2500 words (excluding bibliography and footnotes/ endnotes),
- typed, double-spaced, with standard margins and Times New Roman 12-point font, and page numbers),
- follow a proper citation style,
- draw on *at least* 8 sources, 4 of which may come from the required or recommended course material,
- keep direct quotes to a minimum.

There will be an additional class session in which librarian Corinne Bishop will explain how to search effectively for sources in the library system and introduce citation style resources. I will give you details on the required structure of the final paper in Week 7 of the semester.

A paper proposal should in 2-3 pages introduce a proposed topic, a focused research question and its importance, a broad paper outline, and preliminary bibliography.

Term papers will be presented during week 15, before the *Final Exam*. The presentation should be 5-6 minutes and include the major aspects and findings of your term paper. You must include an introduction to your issue, your research question, key aspects of your analysis, your argument and findings, and a conclusion. Each student will also hand in a feedback form with evaluations of other students' presentations. I will return this feedback to each student which aims to improve your overall presentation skills.

4. ATTENDANCE, PARTICIPATION & QUIZZES (15%)

Class participation involves informed and active contribution to discussions. The quality of one's participation matters significantly more than its frequency and intensity. A good participation grade is possible only if students come to the classroom having read the required material for the week. A quiz may be given at each class based on the assigned required readings for the week. A total of ten brief quiz questions (usually only one or two) will be randomly given during the semester. Quizzes missed due to absence or being late cannot be made up. Two quizzes -either missed quizzes or those with the lowest scores- will be dropped at the end of the semester. These brief quizzes should ensure that students engage with the assigned readings to provide for a fruitful in-class discussion. All grades will be posted on webcourses.

5. EXTRA CREDIT

Students will have the opportunity to earn extra credit points by submitting 2 additional short papers beyond the minimum requirement of 3. Potential other extra credit opportunities (i.e. relevant speaker or career events) will be announced separately via webcourses.

IMPORTANT NOTES

- Late submissions of short papers, your paper proposal, and final paper are not accepted (for exceptions see qualified absences below). All deadlines are announced far in advance (in

this syllabus). Please plan your schedule accordingly.

- All papers are must be submitted as Word document electronically via webcourses@UCF.
- All work submitted in this course must be original work products. Recycling or reusing papers prepared for other courses, in whole or part, is not permitted. All paper submissions will go through **Turnitin**.
- I encourage students to turn off their cell-phones before the beginning of class. **Laptops may be used for note-taking only.** While I understand that there are emergencies, there is a tendency for all of us to multitask– checking email, watching videos, reading websites, etc. However, what we consider [“multitasking” is in fact task-switching](#) and inhibits learning and concentrating at the task (lecture or class discussion) at hand.
- Classes will start promptly as scheduled. If arriving late, please enter as discreetly as possible. Students who do so are marked as “Late” in Webcourses which may result in a lower attendance and participation grade. Please do not leave until class is dismissed.

ABSENCES/ LATE PAPERS

Absences from class that qualify to be excused with a written documentation include illness, serious family emergencies, special curricular requirements (e.g., judging trips, field trips, professional conferences), or University sponsored activities such as music performances, athletic competition, or debate. Please contact me if you are unsure whether something counts as such. For more information on authorized University events, [see the UCF policy](#). Make-up exams can be given in case of qualified absences with documentation. Make-up quizzes will not be given as the two lowest grades will be dropped at the end of class.

CLASS DISCUSSION POLICY

This class is a forum for personal growth, curious discussion, and lively intellectual debate. It is crucial that the spirit of discussion remains open, honest, and respectful even when we disagree. We will always be polite with each other and recognize that even those with whom we disagree have something to contribute to the conversation.

EMAIL POLICY

My typical work hours are 8AM – 6PM Mo-Fr. During these regular workdays, I will respond to messages (via the course page on Webcourses) within 24 hours but typically do not respond after 6PM or on weekends. To facilitate conducting business via web courses, please be sure to write your messages professionally and include all relevant information.

ACADEMIC INTEGRITY, PLAGIARISM, AND CHEATING

According to Section 1, “Academic Misconduct,” students are prohibited from engaging in

1. Unauthorized assistance: Using or attempting to use unauthorized materials, information or study aids in any academic exercise unless specifically authorized by the instructor of record. The unauthorized possession of examination or course-related material also constitutes cheating.
2. Communication to another through written, visual, electronic, or oral means: The presentation of material which has not been studied or learned, but rather was obtained through someone else’s efforts and used as part of an examination, course assignment, or project.
3. Commercial Use of Academic Material: Selling of course material to another person, student, and/or uploading course material to a third-party vendor without authorization or without the express written permission of the university and the instructor. Course materials include but are not limited to class notes, Instructor’s PowerPoints, course syllabi, tests,

- quizzes, labs, instruction sheets, homework, study guides, handouts, etc.
4. Falsifying or misrepresenting the student's own academic work.
 5. Plagiarism: Using or appropriating another's work without any indication of the source, thereby attempting to convey the impression that such work is the student's own.
 6. Multiple Submissions: Submitting the same academic work for credit more than once without the express written permission of the instructor.
 7. Helping another violate academic behavior standards.

Students should also familiarize themselves with the procedures for academic misconduct in UCF's student handbook, [The Golden Rule](#). UCF faculty members have a responsibility for students' education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary respond to academic misconduct. Penalties can include a failing grade in an assignment or in the course, suspension or expulsion from the university, and/or a "[Z Designation](#)" on a student's official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z.

TITLE IX - NO DISCRIMINATION POLICY

Title IX is a federal law that prohibits discrimination based on the sex (gender) of Employees and students of educational institutions that receive federal financial assistance. Title IX's prohibition of sex discrimination includes prohibition of sexual harassment and sexual violence. UCF does not tolerate sex discrimination, sexual harassment or sexual violence of any kind. This prohibition is further explained in the University's [Prohibition of Discrimination, Harassment and Related Interpersonal Violence](#). Any student, faculty, or staff member with questions or concerns about the applicable University policies or who believes that he or she has been the victim of sex discrimination, sexual harassment, or sexual violence is encouraged to contact the University's [Title IX Coordinator](#) and visit the [Let's Be Clear](#) website.

CAMPUS SAFETY STATEMENT

Students should be aware of their surroundings and familiar with some basic safety and security concepts.

- In case of an emergency, dial 911 for assistance.
- Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Students should make a note of the guide's physical location and review the [online version](#).
- If there is a medical emergency during class, students may need to access a first-aid kit or AED (Automated External Defibrillator). To learn where those are located, click [here](#).
- To learn about how to manage an active-shooter situation on campus or elsewhere, consider viewing [this video](#).

RELIGIOUS OBSERVANCES

Students must notify me in advance if they intend to miss class for a religious observance.

DEPLOYED ACTIVE DUTY MILITARY STUDENTS

Students who are deployed active duty military and/or National Guard personnel and require accommodation should contact their instructors as soon as possible after the semester begins and/or after they receive notification of deployment to make related arrangements.

COURSE ACCESSIBILITY STATEMENT

The University of Central Florida is committed to providing access and inclusion for all persons with disabilities. Students with disabilities who need disability-related access in this course should contact the professor as soon as possible. Students should also connect with Student Accessibility Services (SAS) <<http://sas.sdes.ucf.edu/>> (Ferrell Commons 185, sas@ucf.edu, phone 407-823-2371). Through Student Accessibility Services, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential access and accommodations that might be reasonable. Determining reasonable access and accommodations requires consideration of the course design, course learning objectives and the individual academic and course barriers experienced by the student.

COURSE ROADMAP: GENERAL TOPICS

PART I – THE ARRIVAL OF THE BOMB

- Introduction (*The 1940s: Manhattan Project, Arrival of the Bomb, Hiroshima/Nagasaki*)
- Technical Know How (*Building of the Bomb: From Nuclear Energy to Nuclear Weapons, Delivery Methods/Nuclear Triad, Missiles, and Strategic versus Tactical Weapons*)

PART II: THE FIRST ATOMIC AGE

- A Bipolar World (*The (First?) Arms Race, Cold War Nuclear Strategy and Cuban Missile Crisis*)
- The Long Peace (*Nuclear Deterrence and Mutual Assured Destruction, The Spread of Nuclear Weapons: A Debate*)
- Offense and Defense Infrastructure (“*Star Wars and beyond:*” *U.S. and International Missile Defense Capabilities and U.S. Nuclear Command, Control, Surety, and Finances*)

PART III: NUCLEAR PROLIFERATION: THEORIES AND ACTORS

- Demand Side Arguments (*Security, Economic, Normative and Identity Arguments*)
- Supply Side Arguments (*Technical Arguments*)
- Nuclear Actors I (*US, Russia, China*)
- Nuclear Actors II (*France, UK, Israel, North Korea*)

PART IV: ARMS CONTROL

- Nuclear Nonproliferation Regime (*NPT, IAEA, TPNW, Intermediate-Range Nuclear Forces Treaty (INF) and regional efforts, Gender Gap in Arms Control and Disarmament*)
- Nuclear Counterproliferation (*Conventional Weapons, Unconventional Weapons and Intelligence*)

PART V: THE NEW ATOMIC AGE

- Cold War 2.0? (*US-Russia Relations and Nuclear Strategies*)
- A New Arms Race (*New Weapons and Defense Systems, Nuclear Terrorism*)
- Current Regional Developments (*The Middle East, Power Politics in South Asia*)

EXTENDED COURSE ROADMAP WITH READINGS

Readings without a link will be made available through webcourses@UCF. The library also has subscriptions to the major newspapers. Please remember, students are expected to have read and analyzed each day's readings and/or listened to assigned podcasts prior to class.

PART 1 – THE ARRIVAL OF THE BOMB

Week 1: Introduction

Tues, January 7, 2020: Review of syllabus and course introduction

- No readings

Thurs, January 9, 2020: The 1940s: Manhattan Project, Arrival of the Bomb, Hiroshima/Nagasaki

- Cirincione, Joseph. *Bomb scare: the history and future of nuclear weapons*. Columbia University Press, 2007, **Chapter 1**.
- Podcast: "[Remembering Hiroshima and Nagasaki, and Why We Need a 'No First Use' Policy](#)." August 6, 2019. *Press the Button*. Also available on Spotify and iTunes.

Recommended Readings

- Siracusa, Joseph M. *Nuclear weapons: A Very Short Introduction*. OUP Oxford, 2008. **Chapter 1 and 2**.

Short Paper 1: "The bombings of Hiroshima, and three days later, Nagasaki, were an act of war, but they were no crime." Do you agree or disagree with this statement?

Week 2: Technical Know How

Tues, January 14, 2020: Building of the Bomb: From Nuclear Energy to Nuclear Weapons

- Cirincione, Joseph, Jon B. Wolfsthal, and Miriam Rajkumar. "Nuclear Weapons and Materials," in *Deadly Arsenals: Nuclear, Biological, and Chemical Threats* (2005): **pp. 45-56. (=Chapter 3)**

Recommended Readings

- Levite, Ariel E. "Never say never again: nuclear reversal revisited." *International Security* Vol 27 No. 3 (Winter 2002/2003): 59-88.

Thurs, January 16, 2020: Delivery Methods/Nuclear Triad, Missiles, and Strategic versus Tactical Weapons

- Kingston Reif and Travis Sharp, "[Pruning the Nuclear Triad? Pros and Cons of Submarines, Bombers, and Missiles](#)," May 16, 2013. *Center for Arms Control and Non-Proliferation*.

Recommended Readings

- Brodie, Bernard. "Nuclear weapons: strategic or tactical?" *Foreign Affairs* 32, no. 2 (1954): 217-229.
- "Nonstrategic Nuclear Weapons" Updated September 6, 2019, *Congressional Research Service*.

Short Paper 2: Do you think there is a danger that something like the [Nukemap](#) normalizes the idea of nuclear war and encourages people to think of it as inevitable? What are some advantages and disadvantages of the online tool?

PART II: THE FIRST ATOMIC AGE

Week 3: A Bipolar World

Tues, January 21, 2020: The (First?) Arms Race

- Cirincione, *Bomb scare*, Chapter 3
- Department of Defense, "[Narrative Summaries of Incidents Involving Nuclear Weapons.](#)"

Recommended Readings

- Siracusa, Joseph M. *Nuclear weapons: A Very Short Introduction*. OUP Oxford, 2008. **Chapter 3 and 4.**

Thurs, January 23, 2020: Cold War Nuclear Strategy and Cuban Missile Crisis

- Gray, Colin S., and Keith Payne. "Victory is possible." *Foreign Policy* 39 (1980): 14-27.

Recommended Readings

- Jervis, Robert. "Why nuclear superiority doesn't matter." *Political Science Quarterly* 94, no. 4 (1979): 617-633.
- Trachtenberg, Marc. "The influence of nuclear weapons in the Cuban missile crisis." *International Security* 10, no. 1 (1985): 137-163.

Week 4: The Long Peace

Tues, January 28, 2020: Nuclear Deterrence and Mutual Assured Destruction

- Pifer, Steven, Richard C. Bush, Vanda Felbab-Brown, Martin S. Indyk, Michael O'Hanlon, and Kenneth M. Pollack. "US nuclear and extended deterrence: Considerations and challenges." *Brookings Arms Control Series* 3 (2010). **Chapter 1+2 (Pages 1-11)**
- "[Episode #35: Game of Thrones.](#)" *Super Critical Podcast*. May 2012, 2019. Also Available on Spotify and iTunes.
- Kahn, Herman. *On thermonuclear war*. Routledge, 1960. **Conclusion Only: pp. 551-576** "The Problem Must Be Taken Seriously"

Recommended Readings

- Gaddis, John Lewis. "The long peace: Elements of stability in the postwar international system." *International security* 10, no. 4 (1986): 99-142.
- Robert Gard and Greg Terry. "[American Nuclear Strategy: The Case for a Minimal-Deterrence Policy.](#)" *The National Interest*. December 1, 2014.
- Narang, Vipin. "What does it take to deter? Regional power nuclear postures and international conflict." *Journal of Conflict Resolution* 57, no. 3 (2013): 478-508.

Thurs, January 30, 2020: The Spread of Nuclear Weapons: A Debate

- Kenneth Waltz, 'More May Be Better,' in Scott Sagan and Kenneth Waltz (eds.), *The spread of nuclear weapons: A debate renewed*, (New York/ London: W.W. Norton & Company, 2003), **pp. 41-45– Conclusion only.**
- Scott Sagan, 'More Will Be Worse,' in Scott Sagan and Kenneth Waltz (eds.), *The spread of nuclear weapons: A debate renewed*, (New York/ London: W.W. Norton & Company, 2003), **pp. 83-87 Conclusion only.**

Short Paper 3, Option A: How much of 'the long peace' was due to the presence of nuclear weapons, and how much despite them? What other factors might have played a role in the prevention of a direct military conflict?

Short Paper 3, Option B: Strategists and even scholars have engaged in a lively debate and comparison between the dragons in 'Game of Thrones' and nuclear weapons. Compare and contrast both sides of the argument and explain whether you think the dragons yield the same deterrence power as nuclear weapons. Instead of using the dragons, feel free to compare the nuclear weapons to another fictional being from another movie.

Week 5: Offense and Defense Infrastructure

Tues, February 4, 2020: "Star Wars and beyond:" U.S. and International Missile Defense Capabilities

- Siracusa, Joseph M. *Nuclear weapons: A Very Short Introduction*. OUP Oxford, 2008. **Chapter 6**.
- Podcast: "[Star Wars: The Phantom Interceptor](#)," The Center for Arms Control and Non-Proliferation.

Recommended Readings

- "[Space-based Missile Defense](#)." *Union of Concerned Scientists*. Updated 2019.
- Cirincione, Joseph, Jon B. Wolfsthal, and Miriam Rajkumar. "Missile Proliferation," in *Deadly Arsenals: Nuclear, Biological, and Chemical Threats* (2005): **pp. 83-101. (=Chapter 5)**

Thurs, February 6, 2020: U.S. Nuclear Command, Control, Surety, and Finances

- US Department of Defense. "Nuclear posture review." *Office of the Secretary of Defense* (2018). **Pages 51-58**.

Recommended Readings

- Complete "Nuclear posture review."
- Mary B. DeRosa and Ashley Nicolas. "The President and Nuclear Weapons: Authorities, Limits, and Process." *Nuclear Threat Initiative*. December 2019.

Week 6: Library Workshop and Exam Week

Tues, February 11, 2020: Writing and Library Workshop for Final Paper

- *First Half: Library Workshop with [Corinne Bishop](#), Room 235C¹ (walk to the back of Java City Café, room is on the left)*
- *Second Half: Review for Exam I*
- No Readings

Thurs, February 13, 2020: *Exam I*

¹ Note: **Previously 235A**

PART III: NUCLEAR PROLIFERATION: THEORIES AND ACTORS

Week 7: Proliferation Theories

Tues, February 18, 2020: Demand: Security, Economic, Normative and Identity Arguments

- Cirincione, *Bomb scare*, Chapter 4
- Sagan, Scott D. "Why do states build nuclear weapons? Three models in search of a bomb." *International Security* 21, No. 3 (1996-1997): 54-86.

Recommended Readings

- Monteiro, Nuno P., and Alexandre Debs. "The strategic logic of nuclear proliferation." *International Security* 39, no. 2 (2014): 7-51.
- Tannenwald, Nina. 1999. "The Nuclear Taboo: The United States and the Normative Basis of Nuclear Non-Use." *International Organization* 53 (3): 433-68.
- Tannenwald, Nina. 2018. "How Strong Is the Nuclear Taboo Today?" *The Washington Quarterly* 41 (3): 89-109.

Thurs, February 20, 2020: Supply: Technical Arguments

- Fuhrmann, Matthew. "Spreading temptation: Proliferation and peaceful nuclear cooperation agreements." *International Security* 34, no. 1 (2009): 7-41.
- *Second Half: Final Paper and Paper Proposal Structure and Requirements*

Recommended Readings

- Kemp, R. Scott. "The nonproliferation emperor has no clothes: the gas centrifuge, supplyside controls, and the future of nuclear proliferation." *International Security* 38, no. 4 (2014): 39-78.

Short Paper 4: Choose one of the nine nuclear weapons states. Which proliferation model (if any) explains most effectively the country's decision to acquire nuclear weapons?

Week 8: World Nuclear Forces and Actors

Tues, February 25, 2020: Nuclear Actors I: US, Russia, China

- Kristensen, Hans and Matt Korda. "[Status of World Nuclear Forces.](#)" *Federation of Atomic Scientists*. Updated May 2019.
- Podcast: "[Hans Kristensen of the Federation of American Scientists in conversation with Joe Cirincione. Early Warning with Leon Ratz of the Nuclear Threat Initiative.](#)" September 10, 2019. *Press the Button*. Also available on Spotify and iTunes. **13:28 - 39:30.**

Recommended Readings

- Arbatov, Alexey. 2017. "Understanding the US–Russia Nuclear Schism." *Survival* 59 (2): 33–66.

Thurs, February 27, 2020: Nuclear Actors II: France, UK, Israel, North Korea

- *No reading. (Work on Paper Proposal.)*

Recommended Readings

- Cohen, Avner, and Marvin Miller. "Bringing Israel's Bomb Out of the Basement-Has Nuclear Ambiguity Outlived Its Shelf Life." *Foreign Affairs* 89 (2010): 30-44.
- HM Government. "National Security Strategy and Strategic Defence and Security Review 2015: A Secure and Prosperous United Kingdom." (2015).

- Tertrais, Bruno. 2004. "Nuclear Policy: France Stands Alone." *Bulletin of the Atomic Scientists* 60 (4): 48–55.
- Watterson, Christopher J. "What next for sanctions against North Korea?" *Bulletin of the Atomic Scientists*. 75:5 (2019): 247-251.

PART IV: ARMS CONTROL

Week 9: Nuclear Nonproliferation Regime

Paper Proposal Due Monday, March 2, 2019 at 11:59PM

Tues, March 3, 2020: Non-Proliferation of Nuclear Weapons (NPT), International Atomic Energy Agency (IAEA), Treaty on the Prohibition on Nuclear Weapons (TPNW)

- ["The Global Nuclear Nonproliferation Regime,"](#) *Council on Foreign Relations*. May 21, 2012.

Recommended Readings

- [The NPT.](#)
- Davis-Gibbons, Rebecca. "[The Nuclear Ban Treaty: How Did We Get Here and What Does it Mean for the United States?](#)" July 14, 2017. *War on the Rocks*.
- Shultz, George P., William J. Perry, Henry A. Kissinger, and Sam Nunn. "[A world free of nuclear weapons.](#)" *Wall Street Journal* 4, no. 01 (2007).

Thurs, March 5, 2020: Intermediate-Range Nuclear Forces Treaty (INF) and regional efforts, Gender Gap in Arms Control and Disarmament

- David E. Sanger and Edward Wong. "[U.S. Ends Cold War Missile Treaty, With Aim of Countering China.](#)" *The New York Times*. August 1, 2019.
- Renata Dalaqua. "[How to bridge the gender gap in arms control and disarmament.](#)" May 1, 2019. *Bulletin of the Atomic Scientists*.

Recommended Readings

- Korda, Matt. "[We need a Green New Deal for nuclear weapons.](#)" *Bulletin of the Atomic Scientists*. September 11, 2019. Available at
- Miller, Nicholas L. "The secret success of nonproliferation sanctions." *International Organization* 68, no. 4 (2014): 913-944. • Gerzhoy, Gene.

Short Paper 5: After the annulation of the INF, do you think the United States should attempt to negotiate a similar bilateral treaty? Is it feasible to include China and negotiate a multilateral treaty?

Week 10

NO CLASS – Spring Break

Week 11: Nuclear Counterproliferation

Tues, March 17, 2020: Conventional Weapons

- David Makovsky, 'The Silent Strike: How Israel Bombed a Syrian Nuclear Installation and Kept it Secret,' *The New Yorker*, September 17, 2012.

Recommended Readings

- Kreps, Sarah E., and Matthew Fuhrmann. "Attacking the Atom: Does Bombing

Nuclear Facilities Affect Proliferation?" *Journal of Strategic Studies* 34, no. 2 (2011): 161-187.

- Cohen, Avner. "Israel's Airstrike on Syria's Reactor: Implications for the Nonproliferation Regime," *Arms Control Today*, vol. 38, no. 6, 2008
- Braut-Hegghammer, Målfrid. "Revisiting Osirak: Preventive Attacks and Nuclear Proliferation Risks." *International Security* 36, no. 1 (2011): 101-32.
- Ronen Bergman and Mark Mazzetti. "[The Secret History of the Push to Strike Iran.](#)" *The New York Times*. September 4, 2019.

Thurs, March 19, 2020: Unconventional Weapons and Intelligence

- David Halbfinger and Ronen Bergman. "[A Top Syrian Scientist Is Killed, and Fingers Point at Israel.](#)" *The New York Times*. August 6, 2018.

Recommended Readings

- Marco Roscini, 'Cyber Operations as Nuclear Counterproliferation Measures,' *Journal of Conflict and Security Law*, vol. 19, no. 1, 2014, p. 13.

Short Paper 6: What challenges and/or opportunities to you see in arms control? Which arms control effort do you think is most effective to prevent countries from proliferating? Explain why.

PART V: THE NEW ATOMIC AGE

Week 12: Cold War 2.0?

Tues, March 24, 2020: *No Class*

- Watch on your own terms: "Dr. Strangelove or: How I Learned to Stop Worrying and Love the Bomb." A download of the file is available through this link: <https://drive.google.com/open?id=1c03xizKeSnKCOH0pWEW79n6cKgeudKwm>.

Thurs, March 26, 2020: Guest Lecture: Logan Kerschner

- Part I: Lecture: Current US-Russia Relations and Nuclear Strategies
- Part II: Career in the United States Strategic Command (STRATCOM)
- *No reading*

Short Paper 7: The movie Dr. Strangelove was directed in 1964, shortly after the Cuban Missile Crisis but appears to have relevance today. What similarities and differences (if any) do you see between the movie released in the "first nuclear age" and today's nuclear security environment (the "second nuclear age")?

Week 13: A New Arms Race

Tues, March 31, 2020: New Weapons and Defense Systems

- *First Half: Discussion of Dr. Strangelove*
- Jeffrey Smith. "[Hypersonic Missiles Are Unstoppable. And They're Starting a New Global Arms Race.](#)" June 19, 2019. *The New York Times*.

Recommended Readings

- Gregg Herken. "[Russia's mysterious 'new' nuclear weapons aren't really new.](#)" August 15, 2019. *The Washington Post*.
- Gregory D. Koblentz. "[Strategic Stability in the Second Nuclear Age.](#)" November 2014, *Council on Foreign Relations*. Available at
- Glaser, Charles. "The flawed case for nuclear disarmament." *Survival* 40, no. 1

(1998): 112- 128.

Thurs, April 2, 2020: Nuclear Terrorism

- Matthew Bunn and Susan Martin. "Is Nuclear Terrorism a Real Threat?" In Gottlieb, Stuart, ed. *Debating terrorism and counterterrorism: conflicting perspectives on causes, contexts, and responses*. CQ Press, 2013. **Chapter 6**.

Recommended Readings

- Michael Levi, "Stopping Nuclear Terrorism: The Dangerous Allure of a Perfect Defense," *Foreign Affairs* 87:1 (Jan/Feb 2008).
- Ellen Barry, "[A Secret Race for Abandoned Nuclear Material](#)," *New York Times*, 18 Aug 2013.
- Kier A. Lieber and Daryl Press, "Why States Won't Give Nuclear Weapons to Terrorist," *International Security*, Vol 38, No. 1 (Summer 2013): 80-104.

Week 14: Current Regional Developments

Tues, April 7, 2020: The Middle East/ Power Politics in South Asia

- Waltz, Kenneth N. "Why Iran should get the bomb: Nuclear balancing would mean stability." *Foreign Affairs* (2012): 2-5.
- *Very short reading (work on your presentations)*

Recommended Readings

- "[Iran nuclear deal: Key details](#)." *BBC News*. June 11, 2019.
- Bracken, Paul. *The second nuclear age: Strategy, danger, and the new power politics*. Macmillan, 2012. **Chapter 5**.
- Talmadge, Caitlin. "[Are nuclear weapons keeping the India-Pakistan crisis from escalating — or making it more dangerous?](#)" *The Washington Post: Monkey Cage*. March 5, 2019.
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- Biswas, Arka. 2017. "Pakistan's Tactical Nukes: Relevance and Options for India." *Washington Quarterly* 40 (3).

Thurs, April 9, 2020: Student Presentations I (10 students)

Short Paper 8: Based on current developments in the "New Atomic Age," which nuclear security issue confronting the international community now and in the near future do you think is the most pressing one? Make sure to support your speculation and choice with sufficient sources.

Week 15: Student Presentations

Final Paper due Monday, April 13, 2020 at 11:59PM

Tues, April 14, 2020: Student Presentations II (10 students)

Thurs, April 16, 2020: Student Presentations III (8 students)

- *Review for Final Exam*

Week 16: Final Exam Week

Thurs, April 23, 2020: **7:00 AM- 9:50 AM** Final Exam