

## **Problems of Proliferation – INTA 3102 & 8803 - RW**

Fall 2017

Monday, Wednesday & Friday 9:05 – 9:55 am

Clough Room 129

Dr. Rachel Elizabeth Whitlark

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Office Hours Mondays and Wednesdays 2:00 – 3:00 pm; or by appointment

### **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. It will focus not only on social science theories, but also on integrating technical expertise into policy discussions. This combination affords an opportunity to leverage Georgia Tech's strengths in science, technology, and engineering and expose students from both STEM fields and social science and public policy to critical issues in nuclear strategy, nuclear history, and contemporary public policy.

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. Specific topics will include why states proliferate and also abstain, as well as the tools the international community has for both non- and counter proliferation.

### **Learning Objectives**

- 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 Readings**

This course draws on scholarly articles, book chapters, and news sources for each week's readings. These will be made available through the course T-Square website, and most are also accessible through the University Library's electronic databases.

The professor maintains discretion to modify readings and topics as necessary. The reading assigned for each session is to be learned **PRIOR** to coming to class. The workload can be heavy, and students should plan accordingly.

There are no required books to purchase.

Students should also read at least one daily source of national and foreign news, looking in particular at proliferation news, such as *The New York Times*, *The Washington Post*, *The Financial Times*, or *The Wall Street Journal*.

### **Course Grades**

Despite rampant grade inflation in U.S. higher education, this course will not be curved.

I use a traditional grading scale: 100-90 A | 89-80 B | 79-70 C | 69-60 D | 59-0 F

Course assignments will total 100 points.

There are no make-up assignments or additional work to be done so please do not ask.

### **Course Requirements**

#### Participation – 5%

There is no attendance grade in this course. You are adults and the decision to attend class and be an active participant is your choice alone. *That said, experience suggests that for the overwhelming majority of students, course grades and value derived, are directly proportional to student attendance, reading, and participation.* I will also call on students at random regularly during class discussions as well as solicit questions and perspectives throughout. Keep in mind that participation can often make the difference for a borderline grade, though note that less frequent quality comments are preferable to more frequent comments lacking in substance. Finally, while I understand that traffic is difficult here, arrive to class on time – tardiness is poor form.

#### Class Session Presentations – 10%

Twice throughout the semester (for sessions selected by the student during the second course meeting), students will be responsible for introducing the day's readings. This will involve presenting an overview of the argument and content of the reading, as well as engaging critically with these materials by describing, for example, strengths and weaknesses of the material, how well they jive with other readings for the day or previous course materials, and anything else deemed relevant. Students should use visual aids, like a handout for example, as they see fit. Depending on the session, two or three students will be assigned for the day, and it is incumbent on them to divide the readings among them, to be sure that their presentations cover all of the material assigned for that day.

#### Critique – 20%

During weeks 4 and 5, students will learn how to critique an article in the social sciences. They will then select one article from beyond the syllabus to critique in written form. Details will be provided both on how to identify a good article and what the content will look like.

#### Exam – 20%

**Friday, November 10th**, during the class session, students will take an exam designed to test their knowledge of the course content to-date. The exam will be short answer and essay questions based on the assigned readings and class discussion. Students should purchase blue exam books at the university bookstore for use in the exam.

#### Simulation – 15%

During Week 15, students will participate in an in-class simulation. Students will be divided into country-teams, whose positions on the topic at hand must be well-researched and then utilized during the simulation which will loosely mimic a meeting of the United Nations. Additional details will be provided closer to the session. Grades will be based on the in-person simulation participation of the individual (7.5%) and an individual short paper (7.5%) that each person will write describing their country's position, the negotiations that took place, and the final outcome of the simulation. Note that students will grade the other members of their delegation and submit these grades to the professor for consideration in the final grading for the simulation.

Final Paper – 30%

Students will choose any “why” question related to nuclear issues in international politics and seek to explain the issue using the theories discussed in class and empirical evidence drawn both from class and outside research. Undergraduate students’ papers will be approximately 2000 words in length (about 8 pages or so double-spaced) in 12 point Garamond or Times New Roman font. Masters’ students will complete papers of approximately 4000 words or 15-16 pages double-spaced.

<i>Assignment</i>	<i>Date</i>	<i>Content</i>
<b>Participation 5%</b>	Ongoing throughout the semester	Grade will be based on the quality and content of in-class participation.
<b>Class Session Presentations 10%</b>	Two dates selected by each student individually during the second class session.	Students will be responsible for introducing the session’s content for the first five minutes of class.
<b>Exam 20%</b> – Bring Blue Books (available for purchase in university bookstore).	<b>November 10<sup>th</sup> in class</b>	Short answer and essay questions covering all course content to-date.
<b>Simulation 15%</b> 1. In-class participation 2. Individual writing assignment	1. During week 15 of class – <b>November 27, 29 and December 1</b> 2. <b>December 4<sup>th</sup></b> at start of last class session	1. Students will be divided into country teams and simulate international negotiations 2. Students will write individual memos following the simulation. Details forthcoming.
<b>Critique 20%</b>	<b>September 29<sup>th</sup> in class</b>	Students will write a critique of an article from the syllabus. Details forthcoming.
<b>Final Paper 30%</b>	<b>Due on exam date, Wednesday, December 13<sup>th</sup></b>	Additional details will be provided during the semester.

**Late Papers / Penalties / Unexcused Absences**

The dates of the exams and paper assignments are not negotiable and make-ups will not be offered. Assignments turned in after the deadline will be penalized 10% for each day or fraction thereof where it is late. This means that if you turn in the paper at 10:05 am instead of 9:05am on the day

that it is due, you will automatically lose 10% of the total possible points; if you turn it in at 9am on the day after it was due, you will lose 20% and so on and so forth.

Exceptions to this policy will only be granted if you have arranged for accommodations IN ADVANCE in light of a valid conflict including, but not limited to, family or religious obligation, or approved university business including travel or athletic competition which constitutes “approved Institute activities.” Religious holidays and regular sporting competition are both already on the calendar, so these must be brought to me during the first two weeks of the semester. Subsequently, should an unforeseen, new conflict arise, please come meet with me immediately and provide the necessary documentation. If you have a genuine emergency the day of an exam, can provide appropriate, official documentation as provided by the Office of Student Life, and contact me as soon as is possible to alert me to the occurrence, arrangements will be made as necessary to accommodate student need.

### **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 remain 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.

### **Academic Integrity and University Statement on Plagiarism**

According to the Georgia Tech Student Affairs Policy handbook, “Plagiarism” is the act of appropriating the literary composition of another, or parts of passages of his or her writings, or language or ideas of the same, and passing them off as the product of one’s own mind. It involves the deliberate use of any outside source without proper acknowledgment. Plagiarism is scholarly misconduct whether it occurs in any work, published or unpublished, or in any application for funding. There is a zero-tolerance policy for plagiarism and penalties will be doled out per university regulations. The GT Honor Code is available online at <http://policylibrary.gatech.edu/student-affairs/academic-honor-code>

### **Writing Services**

If you are concerned about your writing, or seek to improve it, I highly recommend contacting the GT Communication Center located in Clough Commons 447 (<http://www.communicationcenter.gatech.edu/>) HINT: Anyone who reads this recommendation and thinks themselves above continuously learning to improve their writing should think again.

### **Students with Disabilities**

Georgia Tech is committed to providing accommodation for all students with disabilities through the Office of Disability Services (<http://disabilityservices.gatech.edu/>). Any student in this course who has a disability that may prevent them from fully demonstrating their abilities should contact me as soon as possible to discuss necessary accommodations to ensure full participation and facilitate their educational opportunities. Students with disabilities must be registered with the Disability Services Program prior to receiving accommodations in this course and provide appropriate documentation attesting to their registration. The Disability Services Program is located in Smithgall Student Services Building, phone 404-894-2564 or TDD only 404-894-1664.

### **Additional Student Resources**

The Center for Academic Success ([success.gatech.edu/](http://success.gatech.edu/)) offers a variety of academic support services to help students succeed academically at Georgia Tech (e.g. tutoring, peer-led study groups, study skills, etc.). The Division of Student Life ([studentlife.gatech.edu](http://studentlife.gatech.edu)) – often referred to as the Office of the Dean of Students – offers resources and support for all students in the Tech community. The Counseling Center (<http://counseling.gatech.edu/>) offers free mental health services, as well as stress management and wellness workshops to all currently enrolled students. They are located in Smithgall, 2<sup>nd</sup> Floor, Suite 210.

### **Technology Policy**

The use of laptops, tablets, phones, or other electronic devices is banned during class. Please silence them and put them away as soon as class begins. There is growing evidence that electronic devices hinder learning for you and for those around you. First, recent studies have indicated that students who take longhand notes do better on conceptual questions than those taking notes on laptops. Second, not surprisingly, there is a tendency for anyone to multitask – checking email, watching videos, reading websites, etc. I am guilty of this myself in meetings. Unfortunately, this multitasking inhibits learning. Third, and perhaps most importantly, use of a laptop, cell phone, or tablet can distract those around you, including the professor, and inhibit their learning. For discussion on these points, see, for example: <https://www.washingtonpost.com/news/national/wp/2014/08/26/ditch-the-laptop-and-pick-up-a-pen-class-researchers-say-its-better-for-note-taking/> and <http://chronicle.com/blogs/linguafranca/2014/08/25/why-im-asking-you-not-to-use-laptops/>

### **Email Policy**

As a matter of policy, I will cease responding to emails at approximately 9pm and, may take up to 36 hours to reply to correspondence. To facilitate conducting business via email, please be sure to write your emails professionally and include all relevant information when emailing. For example, if you cannot make my office hours but would like to schedule an individual meeting, please include in your email to me a) that you cannot make my office hours because of other obligations, b) what you are hoping to discuss during your meeting, and c) a variety of dates and times that could work for your schedule such that I can find something that works for mine.

### **Tips for Success**

1. Come to class.
2. Come to class having read and studied the material.
3. Come to class having read and studied the material and prepared to engage with it in discussion.
4. Participate in class both asking and answering questions. I promise you that if you have a question, someone else in the class also has that exact question. There is no such thing as a bad or stupid question.
5. Form study groups both to compare notes and to study for the exam.
6. Make use of all available resources including, but not limited to, the writing center, the library, and the professor's office hours.
7. Do not wait until the week before the course concludes to realize you are struggling in this class. Know that new stuff is often challenging, but with enough time and hard work, this too can be mastered.

## Course Outline: Subject and Readings Schedule

To reiterate: Students are expected to have read and analyzed each day's readings **BEFORE** they arrive in class for that session.

### Week 1 – Introduction

Monday, August 21, 2017

#### *Course Introduction*

- Review of Syllabus

Wednesday, August 23, 2017

#### *Introduction to Technology I*

*Guest Lecture: Abdalla Jaoude, Department of Nuclear & Radiological Engineering, Georgia Tech*

- Cirincione, Joseph, Jon B. Wolfsthal, and Miriam Rajkumar. "Nuclear Weapons and Materials," *Deadly Arsenals: Nuclear, Biological, and Chemical Threats* (2005): 45-56.
- Cirincione, Joseph. *Bomb scare: the history and future of nuclear weapons*. Columbia University Press, 2007: chapters 1 – 3.

Friday, August 25, 2017

#### **NO CLASS**

- **Get Started Reading!**

### Week 2

Monday, August 28, 2017

#### *Library Visit*

- No reading assignment
- Meet in Homer Rice @ Library

Wednesday, August 30, 2017

#### *Introduction to Technology II*

*Guest Lecture: Andrew Conant, Department of Nuclear & Radiological Engineering, Georgia Tech*

- *REVIEW*: Cirincione, Joseph. *Bomb scare*, chapters 2 & 3.
- Nuclear Threat Initiative, *Building a Framework for Assurance, Accountability, and Action*, 3<sup>rd</sup> Edition, Executive Summary ONLY, [https://www.nti.org/media/pdfs/NTI\\_2016\\_Index\\_FINAL.pdf](https://www.nti.org/media/pdfs/NTI_2016_Index_FINAL.pdf)
- International Atomic Energy Agency, *"Safeguards Techniques and Equipment: 2011 Edition,"* Introduction ONLY, [http://www-pub.iaea.org/MTCD/Publications/PDF/nvs1\\_web.pdf](http://www-pub.iaea.org/MTCD/Publications/PDF/nvs1_web.pdf)

Friday, September 1, 2017

#### *Argumentation in the Social Sciences*

#### *Visit to the Communications Lab, Clough 447*

- No reading assignment
- Meet in Communications Lab

### Week 3

**Monday, September 4, 2017**

**LABOR DAY – NO CLASS**

- **Continue Reading!!**

**Wednesday, September 6, 2017**

***Demand I – Security and Economic Arguments***

- 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.
- Monteiro, Nuno P., and Alexandre Debs. "The strategic logic of nuclear proliferation." *International Security* 39, no. 2 (2014): 7-51.
- Solingen, Etel. "The political economy of nuclear restraint." *International Security* 19, no. 2 (1994): 126-169.

**Friday, September 8, 2017**

***Introduction to Social Science Techniques I***

- Fearon, James D. 1991. "Counterfactuals and Hypothesis Testing in Political Science." *World Politics* 43: 169-195.

### Week 4

**Monday, September 11, 2017**

***Demand II - Normative and Identity Arguments***

- Paul, Thazha Varkey. *Power versus prudence: Why nations forgo nuclear weapons*. Vol. 2. McGill-Queen's Press-MQUP, 2000, chapter 1, pages 3-14.
- Rublee, Maria Rost. *Nonproliferation norms: Why states choose nuclear restraint*. University of Georgia Press, 2009, chapters 1, pages 1-34.
- Hymans, Jacques EC. "Isotopes and identity: Australia and the nuclear weapons option, 1949–1999." *The Nonproliferation Review* 7, no. 1 (2000): 1-23.
- Fuhrmann, Matthew, and Michael C. Horowitz. "When leaders matter: Rebel experience and nuclear proliferation." *The Journal of Politics* 77, no. 1 (2014): 72-87.

**Wednesday, September 13, 2017**

***Supply I - Technical Arguments***

- Meyer, Stephen M. *The dynamics of nuclear proliferation*. University of Chicago Press, 1986: chapter 2, pages 19-44.
- Fuhrmann, Matthew. "Spreading temptation: Proliferation and peaceful nuclear cooperation agreements." *International Security* 34, no. 1 (2009): 7-41.
- Kemp, R. Scott. "The nonproliferation emperor has no clothes: the gas centrifuge, supply-side controls, and the future of nuclear proliferation." *International Security* 38, no. 4 (2014): 39-78.

**Friday, September 15, 2017**

***Introduction to Social Science Techniques II***

- Review: Fearon, James D. 1991. "Counterfactuals and Hypothesis Testing in Political Science." *World Politics* 43: 169-195.

## Week 5

**Monday, September 18, 2017**

### ***Guest Lecture – THE CTBTO***

- Thunborg, Annika, "History of Nuclear Testing," podcast available for free on iTunes: <https://itunes.apple.com/us/itunes-u/ctbt-introductory-course/id522629812?mt=10> (40 minutes)

**Wednesday, September 20, 2017**

### ***Supply II - Structural Arguments***

- Hymans, Jacques EC. "Veto players, nuclear energy, and nonproliferation: domestic institutional barriers to a Japanese bomb." *International Security* 36, no. 2 (2011): 154-189.
- Albright, David, and Corey Hinderstein. "Unraveling the AQ Khan and future proliferation networks." *Washington Quarterly* 28, no. 2 (2005): 109-128.

**Friday, September 22, 2017**

### ***No Class – Rosh Hashanah***

- ***Keep Reading!!!***

## Week 6

**Monday, September 25, 2017**

### ***Counter-proliferation***

- 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.
- Miller, Nicholas L. "The secret success of nonproliferation sanctions." *International Organization* 68, no. 4 (2014): 913-944.
- Gerzhoy, Gene. "Alliance coercion and nuclear restraint: how the United States thwarted West Germany's nuclear ambitions." *International Security* (2015): 91-129.

**Wednesday, September 27, 2017**

### ***Non-proliferation***

- Bunn, George. "The Nuclear Nonproliferation Treaty: History and Current Problems." *Arms Control Today* 33, no. 10 (2003): 4.  
[https://fsi.fsi.stanford.edu/sites/default/files/Bunn\\_The\\_Nuclear\\_Nonproliferation\\_Treaty\\_History\\_and\\_Current\\_Problems.pdf](https://fsi.fsi.stanford.edu/sites/default/files/Bunn_The_Nuclear_Nonproliferation_Treaty_History_and_Current_Problems.pdf)
- "The Global Nuclear Nonproliferation Regime | Council on Foreign Relations." *Council on Foreign Relations*. Web. 19 July 2017. <https://www.cfr.org/report/global-nuclear-nonproliferation-regime>
- 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*.  
<https://warontherocks.com/2017/07/the-nuclear-ban-treaty-how-did-we-get-here-what-does-it-mean-for-the-united-states/>



Friday, September 29, 2017

**Critique Assignment Due at Start of Class (9:05 am!)**

Guest Lecture: James Miller, Former Under Secretary of Defense for Policy

- Reading Assignment TBD

Week 7

Monday, October 2, 2017

***Consequences of Proliferation***

- Sagan, Scott Douglas, and Kenneth Neal Waltz. *The spread of nuclear weapons: an enduring debate*. WW Norton & Company, 2013. Chapters 1 and 2 (pp. 3-81).

Wednesday, October 4, 2017

***The Nuclear Revolution***

- Jervis, Robert. *The meaning of the nuclear revolution: Statecraft and the prospect of Armageddon*. Cornell University Press, 1989. Chapter 1, pages 1-45.

Friday, October 6, 2017

***PBS Documentary – The Bomb (part I)***

- No reading assignment

Week 8

Monday, October 9, 2017

**NO CLASS**

- Fall Break

Wednesday, October 11, 2017

**Nuclear Coercion**

- Schelling, Thomas C. *Arms and Influence: With a New Preface and Afterword*. Yale University Press, 2008. Chapter 2, “The Art of Commitment,” pages 35-91.
- Sagan, Scott Douglas. *Moving targets: Nuclear strategy and national security*. Princeton University Press, 1990. Chapter 1.

Friday, October 13, 2017

***Cold War Nuclear Strategy***

- Gray, Colin S., and Keith Payne. "Victory is possible." *Foreign Policy* 39 (1980): 14-27.
- Jervis, Robert. "Why nuclear superiority doesn't matter." *Political Science Quarterly* 94, no. 4 (1979): 617-633.

Week 9

Monday, October 16, 2017

***Deterrence***

- Snyder, Glenn Herald. *Deterrence and defense*. Princeton University Press, 2015: Chapter 1, pages 1-40 (skim the math).
- Glaser, Charles. "Why Do Strategists Disagree about the Requirements of Strategic Nuclear Deterrence?" *Nuclear Arguments: Understanding the Strategic Nuclear Arms and Arms Control Debates* (1989): 109-56.
- 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.

**Wednesday, October 18, 2017**

***Extended Deterrence***

***Guest Lecture: Dr. Rupal N. Mehta, University of Nebraska Lincoln***

- Huth, Paul K. "Extended deterrence and the outbreak of war." *American Political Science Review* 82, no. 2 (1988): 423-443.
- Narang, Neil and Rupal N. Mehta. "The Unforeseen Consequences of Extended Deterrence: Moral Hazard in a Nuclear Protégé," Accepted at the *Journal of Conflict Resolution*.
- Rapp Hooper, Mira. "Uncharted Waters: Extended Deterrence and Maritime Disputes." *The Washington Quarterly* 38, no. 1 (2015): 127-146.

**Friday, October 20, 2017**

***PBS Documentary – The Bomb (part II)***

- No reading assignment

**Week 10**

**Monday, October 23, 2017**

***Nuclear Use***

- Wilson, Ward. "The winning weapon? Rethinking nuclear weapons in light of Hiroshima." *International Security* 31, no. 4 (2007): 162-179.
- Kehler, C. Robert. "Nuclear Weapons & Nuclear Use." *Daedalus* 145, no. 4 (2016): 50-61.
- Hersman, Rebecca. "When Should the President Use Nuclear Weapons?" *War on the Rocks*, August 14, 2017, <https://warontherocks.com/2017/08/when-should-the-president-use-nuclear-weapons/>
- Play around with this and come to class prepared to discuss your findings and observations: <https://nuclearsecrecy.com/nukemap/>

**Wednesday, October 25, 2017**

***Nuclear Non-Use***

- Tannenwald, Nina. "The nuclear taboo: The United States and the normative basis of nuclear non-use." *International organization* 53, no. 3 (1999): 433-468.
- Press, Daryl G., Scott D. Sagan, and Benjamin A. Valentino. "Atomic aversion: Experimental evidence on taboos, traditions, and the non-use of nuclear weapons." *American Political Science Review* 107, no. 1 (2013): 188-206.
- Sagan, Scott D. "Realist perspectives on ethical norms and weapons of mass destruction," in Hashmi, Sohail H., and Steven P. Lee, eds. *Ethics and Weapons of Mass Destruction: Religious and Secular Perspectives*. Cambridge University Press, 2004: 73-95.

**Friday, October 27, 2017**

**Movie – Dr. Strangelove (part I)**

- No reading assignment

## Week 11

**Monday, October 30, 2017**

***Coercion and Compellence***

- Betts, Richard K. *Nuclear Blackmail and Nuclear Balance*. Washington: Brookings (1987): Chapter 1, pages 1-21.
- Kroenig, Matthew. "Nuclear superiority and the balance of resolve: Explaining nuclear crisis outcomes." *International Organization* 67, no. 1 (2013): 141-171.
- Sechser, Todd S., and Matthew Fuhrmann. "Crisis bargaining and nuclear blackmail." *International Organization* 67, no. 1 (2013): 173-195.

**Wednesday, November 1, 2017**

***Nuclear Weapons and Conventional Conflict***

- Mueller, John. "The essential irrelevance of nuclear weapons: Stability in the postwar world." *International Security* 13, no. 2 (1988): 55-79.
- Foot, Rosemary J. "Nuclear coercion and the ending of the Korean conflict." *International Security* 13, no. 3 (1988): 92-112.
- Trachtenberg, Marc. "The influence of nuclear weapons in the Cuban missile crisis." *International Security* 10, no. 1 (1985): 137-163.

**Friday, November 3, 2017**

**Movie – Dr. Strangelove (part II)**

- No reading assignment

## Week 12

**Monday, November 6, 2017**

***Command and Control***

- Schlosser, Eric. *Command and control: Nuclear weapons, the Damascus accident, and the illusion of safety*. Penguin, 2013: "Not Good," 3-17, "Decapitation," 245-265, "Abnormal Environment," 307-334.
- Perrow, Charles. *Normal accidents: Living with high risk technologies*. Princeton University Press, 2011: <http://cs.calstatela.edu/wiki/images/1/14/Perrow.pdf>
- Feaver, Peter D. "Command and control in emerging nuclear nations." *International Security* 17, no. 3 (1992): 160-187.
- Department of Defense, "Narrative Summaries of Incidents Involving Nuclear Weapons," <https://nsarchive.files.wordpress.com/2010/04/635.pdf>

**Wednesday, November 8, 2017**

***Nuclear Zero***

- George P. Shultz, William J. Perry, Henry A. Kissinger and Sam Nunn, "A World Free of Nuclear Weapons." *The Wall Street Journal*, January 4, 2007.

- Schelling, Thomas C. "A world without nuclear weapons?." *Daedalus* 138, no. 4 (2009): 124-129.
- Perkovich, George and James Acton. *Abolishing nuclear weapons*. New York: Routledge, 2008: Introduction and Chapter 1, pages 7-40.
- Glaser, Charles. "The flawed case for nuclear disarmament." *Survival* 40, no. 1 (1998): 112-128.

**Friday, November 10, 2017**

**EXAM**

- In-class, blue books required
- Short answer and essay exam covering course content to-date

**Week 13**

**Monday, November 13, 2017**

***Contemporary Topics I – Nuclear Latency***

- Levite, Ariel E. "Never say never again: nuclear reversal revisited." *International Security* Vol 27 No. 3 (Winter 2002/2003): 59-88.
- Fuhrmann, Matthew, and Benjamin Tkach. "Almost nuclear: introducing the nuclear latency dataset." *Conflict Management and Peace Science* 32, no. 4 (2015): 443-461.
- Mehta, Rupal N., and Rachel Elizabeth Whitlark. "Unpacking the Iranian Nuclear Deal: Nuclear Latency and US Foreign Policy." *The Washington Quarterly* 39, no. 4 (2016): 45-61.

**Wednesday, November 15, 2017**

***Contemporary Topics II – Atomic Obsession***

- Mueller, John. *Atomic obsession: nuclear alarmism from Hiroshima to al-Qaeda*. Oxford University Press, 2009: Chapters 1-5: 3-72.

**Friday, November 17, 2017**

***Contemporary Topics III - Nuclear Terrorism***

***Guest Lecture Professor Jenna Jordan***

- 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: 172-208.
- 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**

**Monday, November 20, 2017**

**Guest Lecture, Mr. Steven Shula, US Strategic Command**

- Readings TBD
- Extra Credit Point available for attendance

**Wednesday, November 22, 2017**

***Thanksgiving***

- *No Class – Enjoy the Holiday Break*

Friday, November 24, 2017

*Thanksgiving*

- *No Class – Enjoy the Holiday Break*

Week 15

Monday, November 27, 2017

**Simulation Part I**

- Details to be distributed in-class

Wednesday, November 29, 2017

**Simulation Part II**

- Details to be distributed in-class

Friday, December 1, 2017

**Simulation Part III**

- Details to be distributed in-class

Week 16 – Last Week of Classes

Monday, December 4, 2017 – LAST DAY OF CLASS

- **Simulation Write-Up Due at Start of Class (9:05am!)**

- Details to be distributed

- **Course Wrap-Up**
  - Details TBD

Wednesday, December 6, 2017 – READING DAY

- NO CLASS

Week 17 – Exam Week

Wednesday, December 13, 2017

- **FINAL PAPERS DUE**

- Details to be provided

**Extra Resources**

- <http://www.armscontrolwonk.com/>
- <http://blog.nuclearsecrecy.com/>
- <https://warontherocks.com/>
- <http://www.38north.org/>
- Office of Technology Assessment, “Delivery Vehicles,” in *Technologies Underlying Weapons of Mass Destruction*: 197-213, 217-219 <http://www.au.af.mil/au/awc/awcgate/ota/9344.pdf>