

The Politics of Nuclear Weapons (Online)
Political Science 340
Section 201

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University of Wisconsin-Milwaukee
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Prerequisite: Junior Standing

COURSE DESCRIPTION: “Now I am become Death, the destroyer of worlds.” Vishnu, *Bhagavad-Gita*. This line from the Hindu holy text was famously recalled by J. Robert Oppenheimer, the architect of the nuclear bomb, upon seeing the first nuclear test at the Trinity test site near Alamogordo, NM, on July 16, 1945. While this event occurred over 75 years ago, we might be tempted to ask ourselves, “Are nuclear weapons and deterrence still relevant in the 21st Century?” The answer is “Most emphatically . . . yes!” The nuclear rivalry between the United States and the Soviet Union during the Cold War transformed the nature and conduct of world politics that exists even to this day. In this class, we will discuss nuclear arsenals and force structures, nuclear jargon, nuclear ethics and psychology, arms control, strategic and civil defense, and the effects of a possible nuclear exchange. In addition, we will also address strategies of deterrence and nuclear weapons decision making. We will also examine the implications stemming from both the vertical and horizontal proliferation of nuclear weapons.

REQUIRED TEXTS:

Futter, Andrew. 2015. *The Politics of Nuclear Weapons*. Los Angeles, CA: Sage.

Sagan, Scott D., and Kenneth N. Waltz. 2013. *The Spread of Nuclear Weapons: An Enduring Debate*. 3rd ed. New York: W. W. Norton & Company. (Hereafter known as S&W)

The Futter textbook is a fairly easy, yet quite informative, read. I think it’s a vast improvement over the previous primary textbook I had used. The Sagan and Waltz book is relatively short and also quite easy to read. There will also be readings available through the Canvas web site in the “Course Overheads and Readings” section on the Home page.

The required texts can be purchased through the UWM Virtual Bookstore or at one of a couple of on-line vendors—both are relatively inexpensive compared to most textbook prices nowadays. I have included links below to the publishers of the texts and to Amazon. You can buy your textbooks through any source you choose, but be sure you get the right books. Let me know if you have any problems finding the books. Also, be aware that sometimes online vendors are unreliable in shipping books in a timely manner—depending on the vendor and the mode of shipping you choose. You will need the Futter textbook for the online quizzes.

<https://us.sagepub.com/en-us/nam/the-politics-of-nuclear-weapons/book242682> (Futter)
<http://books.wwnorton.com/books/detail.aspx?ID=4294971047> (S&W)
www.Amazon.com

You are expected to keep up with the reading. Getting an A or B in this class is highly contingent on reading the assigned chapters and keeping up with what's going on in and out of class. I also highly recommend reading a quality newspaper. Most are available on-line via the Internet. If nothing else, at least access the various news sites on the Internet so you know what is going on in the world from day to day.

FLOW OF THE CLASS: For our purposes in this short Summer semester, a class day will start at 12:00 AM and end at 11:59 PM. Each day, I will post lecture outline notes for the topic that day. These materials, combined with the reading from the textbook and other sources, will constitute the materials for that day. You are to read the assigned chapters and access the lecture notes.

GRADES: Your grade will be based on two exams, and five quizzes. The calculation of your grade will be determined as follows:

MIDTERM EXAM: 35% (**Saturday, June 12**)

FINAL EXAM: 45% (**Saturday, June 26**)

QUIZZES: 20%

94%-100% = A	90%-93% = A-	
87%-89% = B+	84%-86% = B	80%-83% = B-
77%-79% = C+	74%-76% = C	70%-73% = C-
67%-69% = D+	64%-66% = D	60%-63% = D-
0%-59% = F		

EXAMS: Both of the exams will cover material included in the assigned readings and class notes. The midterm exam will include material covered up to that exam date. The final exam will NOT be comprehensive. Both exams may include true/false statements, multiple choice questions, matching sections, identifications, short answers, and essay questions. Both the midterm and final exam will be administered online in the Quizzes section of the Canvas site on the dates indicated above.

You can take the midterm and final exam at any time during the time it is available. But you will only have one opportunity to take it – once you begin the exam, you must finish it. You cannot start an exam, and then enter again at a later time to finish it. You should also make sure you have a secure connection before you begin. You will have 90 minutes to complete the midterm and final exams so be sure to set aside the whole time allotted to take the exams once you begin. I will provide additional instructions pertaining to the exams when we get closer to the dates they will be administered.

Absolutely no makeup exams will be given without a university-approved excuse. If you have a university-approved excuse and miss an exam, get in touch with me immediately, beforehand if possible. If you miss an exam without giving me prior notice, you MUST contact me within 24 hours of that exam to schedule a make-up or you will not be allowed to take a make-up under any circumstances.

QUIZZES: I will administer five quizzes designed to help you focus on the assigned reading—specifically, the Futter text. All questions in the quizzes will come solely from the assigned

reading in the Futter textbook, i.e., NOT from the lecture notes. These quizzes will not be difficult (unless you have not read) and are designed to help you prepare for the exams. The quizzes will be available on the course web site and will each be worth 20 points. The quizzes will each contain ten multiple-choice questions. You can take a quiz at any time on the day it is available. However, you will only have one opportunity to take it—once you begin the quiz, you will have 10 minutes to complete it and you must finish it. You cannot start a quiz and then enter again at a later time to finish it. Moreover, you must take the assigned quiz on the assigned date—**take the practice quiz first to familiarize yourself with how it's done.** You should read and prepare for these quizzes in the same way you would any closed-book in-class quiz and be prepared to complete the quiz on your own. The schedule of quizzes is as follows:

- Quiz #1: Friday, June 4 – Futter chapter 1**
- Quiz #2: Wednesday, June 9 – Futter chapter 2**
- Quiz #3: Tuesday, June 15 – Futter chapter 4**
- Quiz #4: Tuesday, June 22 – Futter chapter 9**
- Quiz #5: Thursday, June 24 – Futter chapters 3, 5**

DISCUSSION FORUM: I will also routinely post discussion questions or statements as a way to get everyone thinking about some of the material in the course. The discussion questions are simply a way to help get everyone involved in the class, and to encourage more in-depth thinking about various topics. The discussion questions also serve as great practice for the questions you might encounter on the exams . . . hint, hint. ;-)

Keep in mind that all responses and postings on the Discussion forum should follow the rules of behavior we would observe in the face-to-face classroom. Your responses to the discussion questions should address the question itself. When you respond to someone else's post, do so with respect and thought. Personal attacks or excessive opinion-spouting will not be allowed. You should engage each other's ideas and respond in a thoughtful, informed manner.

A NOTE ON POSTING: When writing your answers to discussion questions or responses to other students' postings, it is generally easier to write in your regular word-processing program and then copy/paste the text into the discussion forum rather than writing directly on the screen in the discussion. This procedure protects you from losing what you have written if your connection is interrupted.

General Course Information: 1) Please remember that I will be sending everything to your UWM email accounts. If you do not regularly use that account, make sure you check it or forward it to an account you do use regularly. 2) When you need to email a personal question to me, send it to sredd@uwm.edu.

UWM POLICIES AND PROCEDURES: The University of Wisconsin-Milwaukee has several policies concerning students with disabilities, accommodations for religious observances, students called to active military duty, incompletes, discriminatory conduct, academic misconduct, and so forth available for you to read using the following link: <http://www.uwm.edu/Dept/SecU/SyllabusLinks.pdf>. I strongly encourage you to access this link and familiarize yourself with these policies and procedures.

TOPICS, READING ASSIGNMENTS, AND EXAM SCHEDULE: (The following is a tentative outline for Summer, including topics, reading assignments, and exams. You need to read the assigned material by the date shown)

Tuesday, 6/1:

- Class Introduction and getting to know each other

Wednesday, 6/2:

Part I: Nuclear Basics

- Chronology and Jargon of the Nuclear Arms Race
 - Futter 1
 - “Nuclear Nomenclature” **Canvas**
 - Overheads: Nuclear Development History, The Atom, Fission Chain Reaction, Hydrogen Bomb Design, Uranium, ICBM Flight Phases, CEP and Bias, Hard Target Kill Probabilities **Canvas**

Thursday, 6/3:

- Chronology and Jargon of the Nuclear Arms Race (cont.)

Friday, 6/4:

- Chronology and Jargon of the Nuclear Arms Race (cont.)

Monday, 6/7:

Part II: Who Had/Has What and What Did/Do They Have?

- Force Structures (Past, Present, and Future?)
 - Overheads: Cold War (ca. 1985) Nuclear Balance – US-USSR, Cold War (ca. 1985) Triad – US-USSR, Cold War Arms Race – US-USSR, US-USSR Bomber Balance 1985, US-USSR ICBM Balance 1985, US-USSR Submarine Balance 1985, US-USSR Technology Development Race, World Nuclear Forces 2007-2011, U.S. Nuclear Forces 2007-2011, Russian Nuclear Forces 2007-2011, British Nuclear Forces 2007-2011, French Nuclear Forces 2007-2011, Chinese Nuclear Forces 2007-2011, Indian Nuclear Forces 2007-2011, Pakistani Nuclear Forces 2007-2011, Israeli Nuclear Forces 2007-2011, Global Stocks of Highly Enriched Uranium (HEU) 2007, 2009-2010, Global Stocks of Separated Plutonium 2007, 2009-2010 **Canvas**

Tuesday, 6/8:

- Force Structures (Past, Present, and Future?) (cont.)

Wednesday, 6/9:

Part III: Truth and Consequences

- Effects of Nuclear Weapons
 - Futter 2
 - Overheads: Nuclear Explosion Timeline, Nuclear Explosion Relationships, Nuclear Explosion – Physical Effects, Destructive Evolution of Nuclear Weapons, Explosive Yield and Altitude, Radiation Contours, Radiation Decay, Geographic Radiation Exposure, Nuclear War Effects, Nuclear Exchange Scenarios, Temperature Effects of Nuclear War Cases, Destructive Power of Nuclear Weapons **Canvas**
 - Optional Reading: Sagan, Carl. 1983/84. “Nuclear War and Climate Catastrophe: Some Policy Implications.” *Foreign Affairs* 62:257-292. **Canvas**

Thursday, 6/10:

- Effects of Nuclear Weapons (cont.)

Friday, 6/11:

- Effects of Nuclear Weapons (cont.)

Saturday, 6/12:

- **MIDTERM EXAM**

Monday, 6/14:

Part IV: Nuclear Weapons and National Security

- Strategies of Deterrence (Including Scenarios and Targeting)
 - Futter 4
 - Optional Reading:
 - Draper, Theodore. 1985. "Nuclear Temptations: Doctrinal Issues in the Strategic Debate." In *The Nuclear Reader: Strategy, Weapons, War*, eds. Charles W. Kegley, Jr., and Eugene R. Wittkopf. New York: St. Martin's Press. pp. 21-37. **Canvas**
 - McNamara, Robert S. 1983. "The Military Role of Nuclear Weapons: Perceptions and Misperceptions." *Foreign Affairs* 62:59-80. **Canvas**

Tuesday, 6/15:

- Strategies of Deterrence (Including Scenarios and Targeting) (cont.)

Wednesday, 6/16:

- Strategic and Civil Defense
 - Union of Concerned Scientists. 1985. "Star Wars: A Critique." In *The Nuclear Reader: Strategy, Weapons, War*, eds. Charles W. Kegley, Jr., and Eugene R. Wittkopf. New York: St. Martin's Press. pp. 215-231. **Canvas**
 - Optional Reading: Payne, Keith B., and Colin S. Gray. 1984. "Nuclear Policy and the Defensive Transition." *Foreign Affairs* 62:820-842. **Canvas**

Thursday, 6/17:

- Arms Control and Disarmament
 - Futter 9
 - Overheads: SALT I Terms, SALT I & II Effects on Arsenals, Nuclear Explosions 1945-1990, Nuclear Explosions 1991-2006 **Canvas**
 - Optional Reading:
 - Kartchner, Kerry M. 1996. "The Objectives of Arms Control." In *Arms Control: Toward the 21st Century*, eds. Jeffrey A. Larsen and Gregory J. Rattray. Boulder, CO: Lynne Rienner. pp. 19-34. **Canvas**
 - Miller, Steven E. 1984. "Politics Over Promise: Domestic Impediments to Arms Control." *International Security* 8:67-90. **Canvas**
 - Lewis, Harold W. 1985. "The Irrelevance of a Nuclear Freeze." In *The Nuclear Reader: Strategy, Weapons, War*, eds. Charles W. Kegley, Jr., and Eugene R. Wittkopf. New York: St. Martin's Press. pp. 149-152. **Canvas**

Friday, 6/18:

- Arms Control and Disarmament (cont.)

Monday, 6/21:

- Nuclear Proliferation and Nonproliferation—The Trouble with Tribbles
 - Futter 3, 5, 6, 7, 8
 - S&W 1-7
 - Optional Reading: Foran, Virginia I. 1996. "Preventing the Spread of Arms: Nuclear Weapons." In *Arms Control: Toward the 21st Century*, eds. Jeffrey A. Larsen and Gregory J. Rattray. Boulder, CO: Lynne Rienner. pp. 175-200. **Canvas**

Tuesday, 6/22:

- Nuclear Proliferation and Nonproliferation—The Trouble with Tribbles (cont.)

Wednesday, 6/23:

Part V: A Moral Dilemma

- Nuclear Ethics and Psychology
 - National Conference of Catholic Bishops. 1985. "Nuclear Strategy and the Challenge of Peace: Ethical Principles and Policy Prescriptions." In *The Nuclear Reader: Strategy, Weapons, War*, eds. Charles W. Kegley, Jr., and Eugene R. Wittkopf. New York: St. Martin's Press. pp. 43-57. **Canvas**

Thursday, 6/24:

- Nuclear Ethics and Psychology (cont.)

Friday, 6/25:

- Enduring Nuclear Challenges
 - Futter 10, Conclusion

Saturday, 6/26:

- **FINAL EXAM**