

**BIOD-725-DL1:
Terrorism and Weapons of Mass Destruction**

**Spring 2021
Online
3.0 Credits**

Schar School of Policy and Government
George Mason University

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Office Hours: Virtual office hours via Blackboard Discussion Board, or by appointment via Zoom or by phone

Course Description

Since September 11, 2001, the United States has viewed terrorist acquisition and use of chemical, biological, radiological and nuclear (CBRN) weapons as one of the gravest threats to national security. This course provides an in-depth understanding of the history of CBRN terrorism, the current challenges posed by this threat, and the range of national and international policy tools available to address this threat. The goal of the course is to familiarize students with the influence of strategy, technology, organization, psychology, ideology, and economics on the threat of CBRN terrorism and the strategies for managing this danger.

The course is organized into three parts. The first part of the course provides theoretical, historical and methodological frameworks for analyzing the threat of CBRN terrorism. This section will examine methodologies for assessing risk and the ongoing debate about the capabilities and motives of terrorists to acquire and use weapons of mass destruction (WMD). Case studies of terrorists groups that have sought these weapons, as well as those which have not, will be studied.

The second part examines how terrorists could acquire and use nuclear, biological, chemical, and radiological weapons. The incentives for and obstacles to terrorist acquisition and use of each of these types of weapons will be considered in turn.

The third part of the course covers the range of policy tools available to national and international authorities to manage the threat of CBRN terrorism such as intelligence and law enforcement, prevention and deterrence, and crisis and consequence management. Special consideration will be given to how political and economic factors influence homeland security programs. The role of international regimes and organizations on preventing and preparing for CBRN terrorism will also be examined.

Course Objectives:

1. Familiarity with the history of terrorist acquisition and use of CBRN weapons
2. Understanding of the incentives and disincentives for terrorists to acquire and use CBRN weapons
3. Understanding of the technical characteristics of nuclear, biological, chemical and radiological weapons
4. Ability to critically analyze and evaluate strategies for reducing the threat posed by terrorists armed with CBRN weapons
5. Appreciation for the role of international organizations in preventing and responding to terrorism with CBRN weapons

Readings

The following books are recommended for purchase from the Mason bookstore or online:

James J.F. Forest and Russell D. Howard eds., *Weapons of Mass Destruction and Terrorism*, 2nd edition (New York: McGraw-Hill, 2013).

Jonathan B. Tucker, ed., *Toxic Terror: Assessing Terrorist Use of Chemical and Biological Weapons* (Cambridge, Mass.: MIT Press, 2000).

Bruce Hoffman *Inside Terrorism*, Third Edition (New York: Columbia University Press, 2017).

Aside from the books recommended for purchase, all course materials (unless indicated otherwise), will be available on the Blackboard site. The library also has an electronic copy available of *Inside Terrorism*. Given the dynamic nature of this subject, additional readings may be assigned during the semester.

Course Format and Process

This course is an online version of a traditional graduate seminar. That means you will not be listening or watching me lecture very much. Instead, the course structure encourages and requires you to spend a good deal of time assessing and responding critically to each reading and to one another's arguments.

This course is also "asynchronous," meaning that we will not be meeting (virtually or in person) at the same time. Instead, everyone can log in to Blackboard to listen to the lectures and submit their posts to the Discussion Board when it is convenient for them (as long as they do so by the deadlines for each assignment).

The general weekly flow of the course will be as follows:

- You will typically read and/or watch a brief lecture (or two) from me.
- You will read the week's assigned readings.
- You will post a Weekly Analysis Memo on the Discussion Board in response to that week's question. The memo should be 250-500 words long and be based on that week's lecture and assigned readings.
- All Weekly Analysis Memos will be due on 11:59 PM EST on Sundays, giving you a full week to do the readings, analyze them, and respond to the posted questions.
- You will post twice each week to the Up for Debate Forum on the Discussion Board page with briefer posts about the implications of the reading for current events or debates. Your first post, due Thursdays at 11:59 PM EST of each week, will be an original comment on the assigned topic. Your second post, due by 11:59 PM EST on Sunday of each week, will be a response to someone else's first post.
- A document detailing the guidelines and grading for the Weekly Analysis Memos and Up For Debate assignments is available in the Assignments section of Blackboard.

Interaction

We will be able to interact several different ways this semester. First, feel free to post questions to the Q&A section of the Discussion Board which will serve as my virtual office hours. Please post general questions about the course, readings, and lectures here—that way everyone can benefit from your question and my answer. Second, for communications that you want to be confidential or are directly related to your research proposal or research paper that would not be relevant to the rest of the class, please email me with your question. I can respond via email or we can set up a time to talk on the phone or via Zoom. I will try to respond to all emails within 1 business day. Third, I will schedule periodic Ask Me Anything (AMA) meetings via Zoom during the course of the semester.

Assignments and Evaluation

Class Participation (Weekly Analysis Memos: 40%; Up For Debate: 20%)

Graduate seminars traditionally require you to be prepared to discuss the readings and actively participate in discussion. Online courses are no different; we just measure participation a bit differently.

For full participation credit students should complete each Weekly Analysis Memo assignment by the deadline and contribute actively to the Up For Debate discussion each week. Participation will be evaluated in terms of timeliness, volume, and overall quality of contributions to class discussion. Posts made after the due date will only receive half credit. Since these assignments constitute the bulk of your grade for the semester I suggest you answer them as if you are answering a question on a mid-term exam.

Students are *not expected* to have an extensive background in terrorism or CBRN weapons. However, students *are expected* to share their thoughts and insights with the class. Those students with direct professional and related knowledge of these subjects are especially encouraged to participate actively in discussion.

Research Proposal and Paper (40%)

The major writing assignment for this course is a research paper of approximately 3,000 words (12 double-spaced pages) on an approved topic. The paper has to be about an issue related to terrorism and CBRN weapons (sometimes I will allow papers that discuss terrorism or CBRN, you can ask). It can assess the risk posed by a type of CBRN weapon, the threat posed by a particular terrorist group or type of terrorist group or compare two groups, or the paper can analyze national or international efforts to prevent, dissuade, deter, defend against, prepare for, or respond to chemical, biological, radiological, and/or nuclear terrorism. The paper can also examine political, social, organizational, psychological, economic, technological, international or cultural issues associated with CBRN terrorism.

A 2-page research proposal describing the topic of your paper and how you plan on conducting your research is due by 11:59 PM EST on Sunday, February 28. The research proposal should be uploaded to Blackboard as a Word file labeled as Last Name_First Name_Proposal. The paper should include a clear statement of your research question or topic, how you will conduct your research, and a short bibliography of sources you plan on using. The assigned and suggested readings will provide a foundation for your bibliography, but you are expected to find additional sources. Scholarly and academic books and journal articles and reports by reputable think tanks are preferred although for more recent events media reports from respected sources are acceptable. Reports and studies published online are acceptable but web sites that simply aggregate information from other sources (such as Wikipedia) are not acceptable. Students are strongly encouraged to make an appointment with me prior to submitting the proposal to discuss the proposed research topic over the phone, via email or Zoom. Please email me at vkoblent@gmu.edu to make the necessary arrangements.

The research paper is due at 11:59 PM EST on Sunday, May 9. The paper should be submitted as a Word file via Blackboard labeled as Last Name_First Name_Research Paper. The paper should be double-spaced with 12-point font, 1-inch margins, numbered pages, and use the Chicago Manual of Style for footnotes. The deadline for the research paper is strict and extensions will not be permitted in the absence of a genuine emergency or documented illness. A late paper will be penalized a full letter grade (for example, from A to B) for every 24 hour period (or fraction thereof) that it is late.

Extra Credit

You will have the opportunity to earn extra credit by participating in events related to terrorism and weapons of mass destruction and submitting a short paper about the event. Eligible events include webinars sponsored by universities, think tanks, government agencies, or international organizations, and Congressional hearings (<http://www.capitolhearings.org>).

The paper should be at least 500 words long (approximately 2 pages) and provide not only a summary of the speaker(s) presentation, but also your analysis of the presentation using the concepts you are learning about in this class. The paper should include a title page with the following information: title, date, and sponsors of the event, your full name, G#, and word count. The paper should be submitted to me via email no later than 1 week after the date of the event. Up to three such extra credit papers may be submitted during the semester. No extra credit papers will be accepted after the last day of class.

A Note on Work Load

The reading load for this course is heavy. I appreciate that many students work demanding jobs and that it may be difficult to complete all of the reading for each week. The goal for the weekly workload for the course

is 8 to 10 hours, with about 75% of your time devoted to reading and 25% of your time devoted to writing. That means you should plan to be reading somewhere between 6 and 7.5 hours each week.

Blackboard

Access to [MyMason](#) and GMU email are required to participate successfully in this course. Please make sure to update your computer and prepare yourself to begin using the online format BEFORE the first day of class. Check [the IT Support Center](#) website. Navigate to [the Student Support page](#) for help and information about Blackboard. In the menu bar to the left you will find all the tools you need to become familiar with for this course. Take time to learn each tool. Make sure you run a system check a few days before class. Become familiar with the attributes of Blackboard and online learning.

To login in to the course:

1. Go to <http://mymason.gmu.edu>.
2. Login using your NETID and password.
3. Click on the ‘Courses’ tab.
4. Click on BIOD-725 (Spring 2021)

Technical Help

If you have difficulty with accessing Blackboard, please contact the ITU Support Center at 703.993.8870 or support@gmu.edu

If you have trouble with using the features in Blackboard, email courses@gmu.edu

University Policies & Information

Academic Integrity

Students must be responsible for their own work, and students and faculty must take on the responsibility of dealing explicitly with violations. The tenet must be a foundation of our university culture. [See <http://academicintegrity.gmu.edu/distance>].

Honor Code

Students must adhere to the guidelines of the George Mason University Honor Code [See <http://oai.gmu.edu/the-mason-honor-code-2/>].

Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.

MasonLive/Email

Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account. [See <https://masonlivelogin.gmu.edu>].

Patriot Pass

Once you sign up for your Patriot Pass, your passwords will be synchronized, and you will use your Patriot Pass username and password to log in to the following systems: Blackboard, University Libraries, MasonLive, myMason, Patriot Web, Virtual Computing Lab, and WEMS. [See <https://password.gmu.edu>].

Responsible Use of Computing

Students must follow the university policy for Responsible Use of Computing. [See <http://universitypolicy.gmu.edu/university-policies/computing/>].

Students with Disabilities

Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See <http://ods.gmu.edu>].

University Libraries

University Libraries provides resources for distance students. [See <http://library.gmu.edu/distance>].

Writing Center

The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing. [See <http://writingcenter.gmu.edu>]. You can now sign up for an Online Writing Lab (OWL) session just like you sign up for a face-to-face session in the Writing Center, which means YOU set the date and time of the appointment! Learn more about the [Online Writing Lab \(OWL\)](#).

Counseling and Psychological Services

The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See <http://caps.gmu.edu>].

Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act of 1974 (FERPA), also known as the "Buckley Amendment," is a federal law that gives protection to student educational records and provides students with certain rights. [See <http://registrar.gmu.edu/privacy>].

Other Considerations

If there are any issues related to religious holidays, please inform the instructor the first week of class. [See <http://ulife.gmu.edu/calendar/religious-holiday-calendar/>]

SYLLABUS

Week	Topic	Readings and Lectures	Assignments
1 (1/25-1/31)	Introduction	<p><i>Readings</i> Syllabus</p> <p><i>Lectures</i> Quick Start Video: Syllabus Quick Start Video: Blackboard Week 1: Introduction</p>	<p>Review syllabus</p> <p>Post an introduction of yourself to the Introduction section of the Discussion Board by 1/28 and respond to at least one other student's post by 1/31</p>
2 (2/1-2/7)	Terrorism	<p><i>Readings</i> Hoffman <i>Inside Terrorism</i>, Chapters 1-4 (pp. 1-138) and Chapter 8 (pp. 242-268).</p> <p><i>Lecture</i> Week 2 Lecture</p>	<p>Week 2 Weekly Analysis Memo (Due 2/7)</p> <p>Week 2 Up For Debate (1st due 2/4; response due 2/7)</p>
3 (2/8-2/14)	Risk Assessment	<p><i>Readings</i> M. Granger Morgan, "Risk Assessment and Management," <i>Scientific American</i>, July 1993, pp. 32-41.</p> <p>Howard Kunreuther, "Risk Analysis and Risk Management in an Uncertain World," <i>Risk Analysis</i>, Vol. 22, No. 4 (2002), pp. 655-664.</p> <p>Eliezer Yudkowsky, "Cognitive Biases Potentially Affecting Judgment of Global Risks," in Nick Bostrom and Milan M. Cirkovic, eds., <i>Global Catastrophic Risks</i> (Oxford: Oxford University Press, 2008), pp. 91-119.</p> <p>Gregory D. Koblenz, "Predicting Peril or the Peril of Prediction? Assessing the Risk of CBRN Terrorism," in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 705-724.</p> <p><i>Lecture</i> Week 3 Lecture</p>	<p>Week 3 Weekly Analysis Memo (Due 2/14)</p> <p>Week 3 Up For Debate (1st due 2/11; response due 2/14)</p>
4 (2/15-2/21)	The Debate Over the Capabilities and Intentions of Terrorists to Acquire and Use CBRN	<p><i>Readings</i> Richard Falkenrath, "Confronting Nuclear, Biological and Chemical Terrorism," <i>Survival</i>, Vol. 40, No. 3 (Autumn 1998), pp. 43-65.</p> <p>Jessica Stern, "Terrorist Motivations and Unconventional Weapons," in Peter Lavoy, Scott Sagan, and James Wirtz, eds., <i>Planning</i></p>	<p>Week 4 Weekly Analysis Memo (Due 2/21)</p> <p>Week 4 Up For Debate (1st due 2/18; response due 2/21)</p>

	Weapons	<p><i>the Unthinkable: How New Powers Will Use Nuclear, Biological and Chemical Weapons</i> (Ithaca: Cornell University Press, 2000), pp. 202-229.</p> <p>Hoffman, <i>Inside Terrorism</i>, pp. 280-285, 292-295.</p> <p>John Mueller, <i>Overblown</i> (New York: Free Press, 2006), chapter 1 (pp. 13-28).</p> <p>Mark Juergensmeyer, <i>Terror in the Mind of God: The Global Rise of Religious Violence</i> (Berkeley, Calif.: University of California Press, 2000), chapters 8 and 9, pp. 145-186.</p> <p>James J.F. Forest, “Opportunities and Limitations for WMD Terrorism,” in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 55-72.</p> <p>Jean Pascal Zanders, “Assessing the Risk of Chemical and Biological Weapons Proliferation to Terrorism,” <i>Nonproliferation Review</i> (Fall 1999), pp. 17-34.</p> <p><i>Lecture</i> Week 4 Lecture</p>	
5 (2/12-2/28)	Case Studies in Terrorist Acquisition and Use of CBRN Weapons	<p><i>Readings</i></p> <p>Jonathan B. Tucker, “Lessons From the Case Studies,” Tucker, <i>Toxic Terror</i>, pp. 249-270.</p> <p>W. Seth Carus, “The Rajneeshees (1984),” in Jonathan B. Tucker, ed., <i>Toxic Terror: Assessing Terrorist Use of Chemical and Biological Weapons</i> (Cambridge, Mass.: MIT Press, 2000), pp. 115-137.</p> <p>Richard Danzig, Marc Sageman, Terrance Leighton, Lloyd Hough, Hidemi Yuki, Rui Kotani and Zachary M. Hosford, <i>Aum Shinrikyo Insights Into How Terrorists Develop Biological and Chemical Weapons</i> (Washington, DC: Center for New American Security, 2012): https://s3.amazonaws.com/files.cnas.org/documents/CNAS_AumShinrikyo_SecondEdition_English.pdf</p> <p>Adam Dolnik and Anjali Bhattacharjee,</p>	<p>Week 5 Weekly Analysis Memo (Due 2/28)</p> <p>Week 5 Up For Debate (1st due 2/25; response due 2/28)</p> <p>Research Proposal Due by 11:59 PM EST on 2/28</p>

		<p>“ Hamas: Suicide Bombings, Rockets, or WMD?” <i>Terrorism and Political Violence</i>, Vol. 14, No. 3 (Autumn 2002), pp. 109-128.</p> <p>Read <u>one</u> of the following: Jessica E. Stern, “Larry Wayne Harris (1998),” in Tucker, <i>Toxic Terror</i>, pp. 227-246.</p> <p>Jonathan B. Tucker and Jason Pate, “Minnesota Patriots Council (1991),” in Tucker, <i>Toxic Terror</i>, pp. 159-184.</p> <p>W. Seth Carus, “R.I.S.E. (1972),” in Tucker, <i>Toxic Terror</i>, pp. 55-70.</p> <p>Jeffrey D. Simon, “The Alphabet Bomber (1974),” in Tucker, <i>Toxic Terror</i>, pp. 71-94.</p> <p>Jessica E. Stern, “The Covenant, the Sword and the Arm of the Lord (1985),” in Tucker, <i>Toxic Terror</i>, pp. 139-158.</p> <p><i>Lecture</i> Week 5 Lecture</p>	
<p>6 (3/1-3/7)</p>	<p>Jihadists and CBRN Weapons</p>	<p><i>Readings</i> Hoffman, <i>Inside Terrorism</i>, pp. 285-292.</p> <p>Anne Stenersen, <i>Al-Qaida's Quest for Weapons of Mass Destruction: The History Behind the Hype</i> (Germany: VDM Verlag, 2008).</p> <p>Sohail H. Hashimi, “Islamic Ethics and Weapons of Mass Destruction,” in Sohail H. Hashmi and Steven P. Lee, eds., <i>Ethics and Weapons of Mass Destruction: Religious and Secular Perspectives</i> (Cambridge: Cambridge University Press, 2004), pp. 321-352.</p> <p>Nasir Bin Hamd Al-Fadl, <i>A Treatise on the Legal Status of Using Weapons of Mass Destruction Against Infidels</i>, May 2003.</p> <p>Daniel Byman, “Understanding The Islamic State: A Review Essay,” <i>International Security</i>, Vol. 40, No. 4 (Spring 2016), pp. 127-165.</p> <p>Stephen Hummel, “The Islamic State and WMD: Assessing the Future Threat,” <i>CTC Sentinel</i>, Vol. 9, No. 1 (January 2016): 18-21.</p> <p>Columb Strack, “The Evolution of the Islamic</p>	<p>Week 6 Weekly Analysis Memo (Due 3/7)</p> <p>Week 6 Up For Debate (1st due 3/4; response due 3/7)</p>

		<p>State’s Chemical Weapons Efforts,” <i>CTC Sentinel</i>, Vol. 10, No. 9 (October 2017): 19-23. https://ctc.usma.edu/the-evolution-of-the-islamic-states-chemical-weapons-efforts/</p> <p><i>Lecture</i> Week 6 Lecture</p>	
<p>7 (3/8-3/14)</p>	<p>Chemical Terrorism</p>	<p><i>Reading</i> “Chemical Attack: Warfare Agents, Industrial Chemicals and Toxins,” in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 91-97.</p> <p>Jonathan B. Tucker, “Chemical Terrorism: Assessing Threats and Responses,” in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 98-111.</p> <p>Michael Knights, “Born of Desperation: AQI’s Chlorine Car Bombs, 2006-2007,” in Mohammed M. Hafez and Maria Rasmussen, eds., <i>Terrorist Innovations in Weapons of Mass Effect, Phase II</i> (Monterey, CA: Naval Postgraduate School, 2012), pp. 62-89.</p> <p>Robert Jones, Brandon Wills, and Christopher Kang, “Chlorine Gas: An Evolving Hazardous Material Threat and Unconventional Weapon,” in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 291-300.</p> <p>Robyn Pangi, “Consequence Management in the 1995 Sarin Attacks on the Japanese Subway System,” in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 657-685.</p> <p><i>Lecture</i> Week 7 Lecture</p>	<p>Week 7 Weekly Analysis Memo (Due 3/14)</p> <p>Week 7 Up For Debate (1st due 3/11; response due 3/14)</p>
<p>8 (3/15-3/21)</p>	<p>Biological Terrorism</p>	<p><i>Readings</i> “Biological Attack: Human Pathogens, Biotoxin and Agricultural Threats,” in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 113-122.</p> <p>William C. Patrick, III, “Biological Terrorism and Aerosol Dissemination,” <i>Politics and the Life Sciences</i>, Vol. 15, No. 2 (September 1996), pp. 208-210.</p> <p>Gregory D. Koblentz, “Biological Terrorism,” in <i>Living Weapons: Biological Warfare and</i></p>	<p>Week 8 Weekly Analysis Memo (Due 3/21)</p> <p>Week 8 Up For Debate (1st due 3/18; response due 3/21)</p>

		<p><i>International Security</i> (Ithaca: Cornell University Press, 2009), pp. 200-227.</p> <p>Department of Justice, <i>Amerithrax Investigative Summary</i> (Washington, DC: Department of Justice, February 19, 2010), pp. 1-11 (required), Feel free to skim the rest of the document. http://www.justice.gov/archive/amerithrax/docs/amx-investigative-summary.pdf</p> <p>Benjamin Wittes, “Innovation’s Darker Future: Biosecurity, Technologies of Mass Empowerment, and the Constitution,” in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 156-177.</p> <p>Kathleen M Vogel, “Framing Biosecurity: An Alternative to the Biotech Revolution Model?” <i>Science and Public Policy</i>, vol. 35, no. 1 (2008), pp. 45–54.</p> <p><i>Lecture</i> Week 8 Lecture</p>	
<p>9 (3/22-3/28)</p>	<p>Radiological Terrorism</p>	<p><i>Readings</i> “Radiological Attack: Dirty Bombs and Other Devices,” in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 179-184.</p> <p>Charles D. Ferguson and Michelle M. Smith, “Assessing Radiological Weapons: Attack Methods and Estimated Effects,” in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 185-199.</p> <p>Gavin Cameron, “Nuclear Terrorism: Reactors & Radiological Attacks After September 11,” in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 380-398.</p> <p>George Bunn and Chaim Braun, “Terrorism Potential for Research Reactors Compared with Power Reactors,” in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 399-410.</p> <p>Jeffrey Bale, “The North Caucus Conflict and the Potential for Radiological Terrorism,” in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 270-290.</p>	<p>Week 9 Weekly Analysis Memo (Due 3/28)</p> <p>Week 9 Up For Debate (1st due 3/25; response due 3/28)</p>

		<p>Igor Khripunov, "The Social and Psychological Impact of Radiological Terrorism," <i>Nonproliferation Review</i>, Vol. 13, No. 2 (July 2006), pp. 275-316.</p> <p><i>Lecture</i> Week 9 Lecture</p>	
<p>10 (3/29-4/4)</p>	<p>Nuclear Terrorism</p>	<p><i>Readings</i> "Nuclear Attack," in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, p. 201-208.</p> <p>Matthew Bunn, "A Mathematical Model of the Risk of Nuclear Terrorism," <i>Annals of the Academy of Political and Social Science</i> (September 2006), pp. 103-120.</p> <p>Morton Bremer Maerli, Anette Schaper, and Frank Barnaby, "The Characteristics of Nuclear Terrorist Weapons," in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 209-222.</p> <p>Matthew Bunn and Anthony Weir, "The Seven Myths of Nuclear Terrorism," in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 223-235.</p> <p>John Mueller, "The Atomic Terrorist?" in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 236-254.</p> <p>David Albright and Corey Hinderstein, "Unraveling the A.Q. Khan and Future Proliferation Networks," in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 256-269.</p> <p><i>Lecture</i> Week 10 Lecture</p>	<p>Week 10 Weekly Analysis Memo (Due 4/4)</p> <p>Week 10 Up For Debate (1st due 4/1; response due 4/4)</p>
<p>11 (4/5-4/11)</p>	<p>Nuclear Security</p>	<p><i>Readings</i> Joby Warrick and Walter Pincus, "Missteps in the Bunker," <i>Washington Post</i>, September 23, 2007, p. A1, http://www.washingtonpost.com/wp-dyn/content/article/2007/09/22/AR2007092201447.html</p> <p>Scott Sagan, "The Problem of Redundancy Problem: Why More Nuclear Security Forces May Mean Less Nuclear Security," <i>Risk</i></p>	<p>Week 11 Weekly Analysis Memo (Due 4/11)</p> <p>Week 11 Up For Debate (1st due 4/8; response due 4/11)</p>

		<p><i>Analysis</i>, Vol. 24, No. 4 (2004), pp. 935-946.</p> <p>Matthew Bunn, "Cooperation to Secure Nuclear Stockpiles," <i>Innovations</i>, Vol. 1, No. 1 (Winter 2006), pp. 115-137.</p> <p>Kenneth N. Luongo and Brig. Gen. (Ret.) Naeem Salik, "Building Confidence in Pakistan's Nuclear Security," <i>Arms Control Today</i>, December 2007, http://www.armscontrol.org/act/2007_12/Luongo</p> <p>Rolf Mowatt-Larsen, "Nuclear Security in Pakistan: Reducing the Risks of Nuclear Terrorism," <i>Arms Control Today</i>, July/August 2009, http://www.armscontrol.org/system/files/July_Aug_2009_ACT_Electronic.pdf</p> <p>Feroz Hassan Khan, "Nuclear Security in Pakistan: Separating Myth From Reality," <i>Arms Control Today</i>, July/August 2009, http://www.armscontrol.org/system/files/July_Aug_2009_ACT_Electronic.pdf</p> <p><i>Lecture</i> Week 11 Lecture</p>	
<p>12 (4/12-4/18)</p>	<p>State-Sponsored CBRN Terrorism</p>	<p><i>Readings</i></p> <p>Hoffman, <i>Inside Terrorism</i>, pp. 269-280.</p> <p>Michael R. Eastman and Robert B. Brown, "Security Strategy in the Gray Zone: Alternatives for Preventing WMD Handoff to Non-State Actors," in Russell D. Howard and Reid L. Sawyer, eds., <i>Terrorism and Counterterrorism: Understanding the New Security Environment</i>, Second Edition (New York: McGraw Hill, 2006), pp. 298-312.</p> <p>Matthew C. Waxman, "Self-Defense and the Limits of WMD Intelligence," in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 477-496.</p> <p>Caitlin Talmadge, "Deterring a Nuclear 9/11," <i>Washington Quarterly</i>, Vol. 30, No. 2 (Spring 2007), pp. 21-34.</p> <p>Gregory D. Koblentz and Jonathan B. Tucker,</p>	<p>Week 12 Weekly Analysis Memo (Due 4/18)</p> <p>Week 12 Up For Debate (1st due 4/15; response due 4/18)</p>

		<p>“Tracing an Attack: The Promise and Pitfalls of Microbial Forensics,” in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 579-596.</p> <p>Daniel Byman, “Iran, Terrorism, and Weapons of Mass Destruction,” <i>Studies in Conflict and Terrorism</i>, Vol. 31, No. 3 (2008), pp. 169-181.</p> <p>Gregory Giles, “A Framework For Assessing the Threat of Iranian WMD Terrorism Against the United States,” Prepared Statement for the House Committee on Homeland Security Subcommittee on Prevention of Nuclear and Biological Attack, <i>Hearing on WMD Terrorism and Proliferant States</i>, September 8, 2005, http://www.nti.org/media/pdfs/WMD_Terrorism_and_Proliferant_States_9-8-05.pdf?_=1318483610</p> <p>John Parachini, “Collapsing States and Abrupt Regime Changes: Implications for NBC Terrorism,” in Brad Roberts., ed., <i>Hype or Reality? The “New Terrorism” and Mass Casualty Attacks</i> (Alexandria, VA: Chemical and Biological Arms Control Institute, 2000), pp. 83-108.</p> <p><i>Lecture</i> Week 12 Lecture</p>	
<p>13 (4/19-4/25)</p>	<p>The Political Economy of Homeland Security</p>	<p><i>Readings</i> Michael E. O’Hanlon, et al., <i>Protecting the American Homeland: One Year On</i> (Washington, DC: Brookings, 2002), pp. 77-97.</p> <p>Congressional Budget Office, <i>Homeland Security and the Private Sector</i> (Washington, D.C.: Congressional Budget Office, December 2004), pp. 1-8. Plus read one of the following chapters: Chapter 2: Civilian Nuclear Power (pp. 9-20), Chapter 3: Chemical and Hazardous Materials (pp. 21-28), or Chapter 5: Food and Agriculture (pp. 39-44): http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/60xx/doc6042/12-20-homelandsecurity.pdf</p> <p>Brian Finlay, “Minding Our Business: The Role of the Private Sector in Managing the WMD Supply Chain,” in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>,</p>	<p>Week 13 Weekly Analysis Memo (Due 4/25)</p> <p>Week 13 Up For Debate (1st due 4/22; response due 4/25)</p>

		<p>pp. 497-505.</p> <p>Brian Finlay, “The Bioterror Pipeline: Big Pharma, Patent Expiration, and New Challenges to Global Security,” in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, pp. 148-155.</p> <p>Veronique de Rugy, <i>What Does Homeland Security Spending Buy?</i> AEI Working Paper #107 (Washington, DC: American Enterprise Institute, October 2004), http://www.aei.org/wp-content/uploads/2009/01/20050408_wp107.pdf</p> <p><i>Lecture</i> Week 13 Lecture</p>	
14 (4/26-5/2)	The Role of International Organizations in Preventing and Responding to CBRN Terrorism	<p><i>Readings</i></p> <p>Robert O. Keohane, “International Institutions: Can Interdependence Work?” in Robert Art and Robert Jervis, <i>International Politics</i>, pp. 150-157.</p> <p>Anne-Marie Slaughter, “Government Networks and Global Governance,” in Art and Jervis, <i>International Politics</i>, pp. 554-563.</p> <p>Natasha E. Bajema, “Assessing the Role of the Nonproliferation Regimes: Are They Relevant Tools for Countering WMD Terrorism?” in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, 1st edition, (2008), pp. 363-378.</p> <p>Chen Kane, “Gaps in the International Framework for Combating WMD Terrorism,” in Forest and Howard, <i>Weapons of Mass Destruction and Terrorism</i>, 1st edition (2008), pp. 487-497.</p> <p><i>Lecture</i> Week 14 Lecture</p>	<p>Week 14 Weekly Analysis Memo (Due 5/2)</p> <p>Week 14 Up For Debate (1st due 4/29; response due 5/2)</p>
15 (5/3-5/9)	Research Paper	No readings or lecture	Research Paper Due 11:59 PM EST on 5/9