

# **GOVT-490-011: Weapons of Mass Destruction**

**Spring 2021**

**Online**

**3.0 Credits**

Schar School of Policy and Government

George Mason University

Professor Gregory D. Koblentz, PhD, MPP

Wednesdays, 10:30 AM-1:10 PM EST

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

## **Course Description**

This course examines the threats posed by the proliferation of nuclear, biological, and chemical weapons, commonly known as weapons of mass destruction (WMD), and how these dangers can be managed. The course provides an in-depth understanding of the history and technology of each of these weapons, the current challenges posed by these weapons, and the range of national and international responses to these threats. The goal of the course is to familiarize students with the influence of strategy, technology, politics, organizations, and norms on the causes and consequences of the proliferation of WMD.

The course is divided into three parts. The first part examines the development of nuclear, biological, and chemical weapons from historical and technical perspectives. The second part examines the motivations of states to pursue, use, and abandon these weapons, the impact of these weapons on international security, and the global nonproliferation regime designed to contain these threats. The third part of the course examines current and future proliferation challenges facing the international community with a focus on Russia, China, North Korea, Iran, Syria, and terrorist groups.

## **Course Objectives**

1. Familiarity with the science and technology of how nuclear, biological, and chemical weapons are developed and deployed.
2. Familiarity with the history of how and why states have acquired, used, and abandoned, nuclear, biological, and chemical weapons.
3. Understanding the consequences of the proliferation of nuclear, biological, and chemical weapons on U.S. national security and international security.

4. Ability to critically analyze and evaluate strategies for reducing the threat posed by nuclear, biological, and chemical weapons.
5. Appreciation for the role of international treaties, regimes, and organizations in preventing the proliferation of nuclear, biological, and chemical weapons.

## **Readings**

All course materials will be available on the Blackboard site. Given the dynamic nature of this subject, additional readings may be assigned during the semester.

### *Attendance and Participation*

Attendance at all classes is required. You are expected to have your camera on during online synchronous class meetings unless there are extenuating circumstances. You may use an appropriate virtual background. All class sessions will be recorded to cloud for viewing throughout the semester.

Students are expected to read the assigned readings before class, be prepared to discuss the readings, and actively participate in discussions during class. In order to participate actively in class, students are encouraged to stay informed of current events.

Participation will be evaluated in terms of contributions to discussion in class and on Blackboard. Attendance and class participation will account for 20% of the final grade.

### *Weekly Memos*

Weekly discussion questions will be posted on Blackboard. Each week, you will post a memo on the Discussion Board in response to that week's discussion question. The memo should be 250-500 words long and be based on that week's lecture and assigned readings. You should treat each of these memos as you would answering a question on a mid-term exam. A document detailing the guidelines and grading for the weekly memos is available in the Assignments section of Blackboard. All memos will be due on Mondays at 11:59 PM EST. In addition, you are expected to read everyone else's memos before class and be prepared to discuss them in class on Wednesdays. These weekly memos are worth 25% of your grade.

### *Research Paper*

Students are required write a 10-page (2,500-word maximum) research paper on an approved topic. The paper can be about any issue related to nuclear, biological, and/or chemical weapons or delivery systems. For example, the paper can assess the risk posed by a type(s) of WMD, the threat posed by a country developing or using a WMD, the risk that a particular terrorist group or type of terrorist group will acquire and use WMD, or the effectiveness of national or international efforts to prevent, dissuade, deter, defend against, prepare for, or

respond to the proliferation of WMD. The paper can also examine political, social, organizational, psychological, economic, technological, international, or cultural issues associated with the proliferation, use, and abandonment of nuclear, biological, and/or chemical weapons. In general, a narrowly framed question that allows you to do a deep dive on a specific issue will turn out better than a broadly framed paper that tries to cover too much and winds up being superficial.

A 2-page proposal should be uploaded to Blackboard as a Word file by 11:59 PM EST on **February 24**. The file should be labeled as Your Last Name\_Your First Name\_Proposal. The proposal 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. Books, articles in academic and policy journals, and reports by government agencies, international organizations, or reputable think tanks are preferred although for more recent events media reports 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 required to discuss their proposed topic with me prior to submitting the proposal. The discussion can take place via email, Zoom, or over the phone. Please contact me via email to make the necessary arrangements. The research proposal is worth 10% of your grade.

The research paper is due on Sunday, **May 9** at 11:59 PM EST. The paper should be submitted as a Word file via Blackboard. The file should be labeled as Your Last Name\_Your 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. The research paper is worth 40% of your grade.

### *Grading*

Your final grade will be calculated as follows:

Attendance and Participation	25%
Weekly Memos	25%
Research Proposal	10%
Research Paper	40%

A late exam or paper will be penalized a full letter grade (for example, from A to B) for every 24-hour period that it is late.

### *Extra Credit*

You will have the opportunity to earn extra credit by participating in events related to weapons of mass destruction and submitting a 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.

### **Course Format and Process**

This course is an online version of a traditional 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 the readings and to each other.

This course will be conducted as a hybrid online course with synchronous and asynchronous components. The synchronous component will be meetings held via Zoom on Wednesdays between 10:30 AM-1:10 PM. For the asynchronous component, you will be asked to watch videos or short lectures before the synchronous class. These videos and lectures will be posted in the Course Content section of Blackboard. In addition, each week you will submit short writing assignments to the Discussion Board on Blackboard based on discussion questions related to the readings.

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

- You will typically listen to or watch a brief lecture (or two) from me.
- You will read the week's assigned readings.
- You will post a memo on the Discussion Board in response to that week's discussion question. The memo should be 250-500 words long and be based on that week's lecture and assigned readings. A document detailing the guidelines and grading for the weekly memos is available in the Assignments section of Blackboard.
- All memos will be due on 11:59 PM EST on Mondays.
- You will read everyone's memos before class and be prepared to discuss that week's discussion question in class.

- Synchronous class session will be held from 10:30-1:10 PM EST on Wednesdays. Class time not used for lecture or discussion may be used to hold office hours or for optional Ask Me Anything (AMA) sessions.

## **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 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 periodically use part of the scheduled synchronous class time to hold Ask Me Anything (AMA) sessions where you can, well, ask me anything you want about weapons of mass destruction and related topics.

## **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 into 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 GOVT-490 (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](mailto:support@gmu.edu)

If you have trouble with using the features in Blackboard, email [courses@gmu.edu](mailto: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://masonlive.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/>]

## Course Syllabus

### PART I: THE DEVELOPMENT OF WEAPONS OF MASS DESTRUCTION: HISTORY AND TECHNOLOGY

#### WEEK 1 (1/25-1/27): Introduction: What are Weapons of Mass Destruction?

##### Readings

Course Syllabus

W. Seth Carus, *Defining “Weapons of Mass Destruction”*, Center for the Study of Weapons of Mass Destruction Occasional Paper No. 8 (Washington, DC: National Defense University, 2012), pp. 1-2, 35-50 (required), 3-34 (optional).

[https://ndupress.ndu.edu/Portals/68/Documents/occasional/cswmd/CSWMD\\_OccasionalPaper-8.pdf](https://ndupress.ndu.edu/Portals/68/Documents/occasional/cswmd/CSWMD_OccasionalPaper-8.pdf)

#### WEEK 2 (1/28-2/3): Nuclear Weapons

Office of Technology Assessment, *Technologies Underlying Weapons of Mass Destruction*, OTA-BP-ISC-115 (Washington, DC: Government Printing Office, December 1993), chapter 4. <https://ota.fas.org/reports/9344.pdf>

Arms Control Association, “Nuclear Weapons: Who Has What,” August 2020, <https://www.armscontrol.org/factsheets/Nuclearweaponswhohaswhat>

The U.S. National Academies and Department of Homeland Security, *Nuclear Attack* (Washington, DC: National Academies of Sciences, 2004).

[https://www.dhs.gov/xlibrary/assets/prep\\_nuclear\\_fact\\_sheet.pdf](https://www.dhs.gov/xlibrary/assets/prep_nuclear_fact_sheet.pdf)

##### Supplemental Resources

Neil Halloran, “Simulation of a Nuclear Blast in a Major City,” YouTube, October 1, 2020, [7:58] <https://nerdist.com/article/nuclear-bomb-impact-city-documentary-short-nobel-prize-research/>

Nuclear Notebook, <https://thebulletin.org/nuclear-notebook/>

Podcast, “A Most Terrible Weapon,” <https://warontherocks.com/author/usha-sahay/>

#### WEEK 3 (2/4-2/10): Biological Weapons

Office of Technology Assessment, *Technologies Underlying Weapons of Mass Destruction*, OTA-BP-ISC-115 (Washington, DC: Government Printing Office, December 1993), chapter 3. <https://ota.fas.org/reports/9344.pdf>

The U.S. National Academies and Department of Homeland Security, *Biological Attack: Human Pathogens, Biotoxins, and Agricultural Threats* (Washington, DC: National Academies of Sciences, 2004). [https://www.dhs.gov/xlibrary/assets/prep\\_biological\\_fact\\_sheet.pdf](https://www.dhs.gov/xlibrary/assets/prep_biological_fact_sheet.pdf)

Gregory D. Koblentz, “Historical Aspects of Biological Weapons Development and Use,” in Sunit K. Singh and Jens H. Kuhn, eds., *Defense Against Biological Attacks*, Volume I (Basel, Switzerland: Springer Nature AG, 2019).



### Supplemental Resources

- BBC 4 Radio, “Apocalypse How: Death by DNA,” December 7, 2020, <https://www.bbc.co.uk/programmes/m000q3hk> [28:00]
- Gregory D. Koblentz, “Will COVID-19 Generate More Interest in Biological Weapons?” July 22, 2020, [https://www.youtube.com/watch?v=wt3iQQk7S9Y&feature=emb\\_logo](https://www.youtube.com/watch?v=wt3iQQk7S9Y&feature=emb_logo) [1:07:26]
- “Anthrax Diaries: An Anthropology of Biological Weapons,” <http://russian.cornell.edu/bio/cfm/film.cfm> [26:52]
- ZDF documentary on Unit 731, <https://www.youtube.com/watch?v=0hRSZMgLI6Y>
- NHK documentary on Unit 731, <https://www.dailymotion.com/video/x6do40u>

### WEEK 4 (2/11-2/17): Chemical Weapons

Office of Technology Assessment, *Technologies Underlying Weapons of Mass Destruction*, OTA-BP-ISC-115 (Washington, DC: Government Printing Office, December 1993), chapter 2. <https://ota.fas.org/reports/9344.pdf>

The U.S. National Academies and Department of Homeland Security, *Chemical Attack: Warfare Agents, Industrial Chemicals, and Toxins* (Washington, DC: National Academies of Sciences, 2004). [https://www.dhs.gov/xlibrary/assets/prep\\_chemical\\_fact\\_sheet.pdf](https://www.dhs.gov/xlibrary/assets/prep_chemical_fact_sheet.pdf)

### Supplemental Resources

- BBC Radio, “Chemical Weapons,” January 12, 2014, <https://www.bbc.co.uk/programmes/b03nt8jh> [38:00]
- BBC Radio, “Chemists’ Dirty Secret,” January 12, 2019, <https://www.bbc.co.uk/programmes/m0001zwz> [57:00]
- Nukes of Hazard podcast, “Survivor of 1988 Chemical Weapons Attack Shares His Story,” July 28, 2000, <https://armscontrolcenter.org/survivor-of-1988-chemical-weapons-attack-shares-his-story/> [32:44]
- Salisbury Nerve Agent Attack: The Inside Story*, Panorama on BBC, [https://www.youtube.com/watch?v=IgSup\\_C97Sc](https://www.youtube.com/watch?v=IgSup_C97Sc) [47:16]
- BellingChat podcast, “Hunting the Salisbury Poisonings Suspects (Episode 3),” June 16, 2020, <https://www.bellingcat.com/resources/podcasts/2020/06/16/bellingchat-episode-3-hunting-the-the-salisbury-poisonings-suspects/> [40:38]
- True Spies podcast, “N is for Novichok (Season 2, Episode 2),” <https://lnk.to/true-spies> or <https://www.youtube.com/watch?v=6PVk3rnRAV0> [57:00]

### WEEK 5 (2/18-2/24): Delivery Systems

Office of Technology Assessment, *Technologies Underlying Weapons of Mass Destruction*, OTA-BP-ISC-115 (Washington, DC: Government Printing Office, December 1993), chapter 5. <https://ota.fas.org/reports/9344.pdf>

Dennis M. Gormley, “Missile Contagion,” *Survival* 50:4 (2008):137-154. DOI: 10.1080/00396330802329006

Government Accountability Office (GAO), *Hypersonic Weapons*, September 2019, <https://www.gao.gov/assets/710/701369.pdf>

Congressional Research Service, *Defense Primer: Ballistic Missile Defense*, December 29, 2020, <https://fas.org/sgp/crs/natsec/IF10541.pdf>

## **PART II: WMD PROLIFERATION AND NONPROLIFERATION REGIME**

### **WEEK 6 (2/25-3/3): Motivations to Develop, Use, and Abandon WMD**

Scott Sagan, “Why Do States Build Nuclear Weapons? Three Models in Search of a Bomb,” *International Security*, Vol. 21, No. 3 (Winter 1996/97), pp. 54-86.

Gregory D. Koblentz, “Regime Security: A New Theory for Understanding the Proliferation of Chemical and Biological Weapons,” *Contemporary Security Policy*, Vol. 34, No. 3 (December 2013): 501-525.

Mitchell Reiss, “Nuclear Rollback Decisions: Future Lessons?” *Arms Control Today*, July/August 1995, pp. 10-15.

### **WEEK 7 (3/4-3/10): Nuclear Nonproliferation Regime**

Francis J. Gavin, “Strategies of Inhibition: U.S. Grand Strategy, the Nuclear Revolution, and Nonproliferation,” *International Security*, Vol. 40, No. 1 (Summer 2015), pp. 9–46, doi:10.1162/ISEC\_a\_00205

John Simpson, “The Future of the NPT,” in Nathan E. Busch and Daniel H. Joyner, eds., *Combating Weapons of Mass Destruction: The Future of International Nonproliferation Policy* (Athens, GA: University of Georgia Press, 2009), 45-73.

Eric Brewer, “Will Nuclear Weapons Make A Comeback? Why the Global Nonproliferation Regime Is Fraying,” *Foreign Affairs*, September 23, 2019.

#### *Recommended Websites:*

Nuclear Non-Proliferation Treaty (NPT): <https://www.un.org/en/conferences/npt2020>

International Atomic Energy Agency (IAEA): [www.iaea.org](http://www.iaea.org)

Comprehensive Test Ban Treaty Organization (CTBTO): [www.ctbto.org](http://www.ctbto.org)

#### *Supplemental Resources*

Council on Foreign Relations, “Paul C. Warnke Lecture on International Security: The Nuclear Nonproliferation Treaty—Reducing the Threat of Nuclear Weapons,” January 13, 2021, <https://www.cfr.org/event/paul-c-warnke-lecture-international-security-nuclear-nonproliferation-treaty-reducing-threat>

### **Week 8 (3/11-3/17): Chemical and Biological Weapons Nonproliferation Regime**

Fiona Simpson, “Evolution and Innovation: Biological and Chemical Weapons,” in Bruce D. Jones, Shepard Forman, and Richard Gowan, eds., *Cooperating for Peace and Security: Evolving Institutions and Arrangements in a Context of Changing U.S. Security Policy* (Cambridge: Cambridge University Press, 2009), 166-184.

Stefano Costanzi and Gregory D. Koblentz, “Updating the CWC: How We Got Here and What Is Next,” *Arms Control Today*, Vol. 5, No. 3 (April 2020), pp. 16-20.

Marie Isabelle Chevrier and Alex Spelling, “The Traditional Tools of Biological Arms Control and Disarmament,” in Filippa Lentzos, ed., *Biological Threats in the 21<sup>st</sup> Century* (London: Imperial College Press, 2016), pp. 331-356.

#### *Recommended Websites:*

Organization for the Prohibition of Chemical Weapons (OPCW): [www.opcw.org](http://www.opcw.org)  
Biological Weapons Convention (BWC): <https://www.unog.ch/bwc/isu>  
Australia Group (AG): <https://australiagroup.net/en/>  
International Partnership Against Impunity for the Use of Chemical Weapons: <https://www.noimpunitychemicalweapons.org/-en-.html>

#### *Supplemental Resources*

BBC Radio, “Banning chemical weapons with Alastair Hay,” November 27, 2018, <https://www.bbc.co.uk/programmes/m0001b03> [28:00]

CSIS, “Restoring Restraint: Enforcing Accountability for Users of Chemical Weapons,” June 19, 2018, [https://www.youtube.com/watch?time\\_continue=7&v=AJvgqjAITVM](https://www.youtube.com/watch?time_continue=7&v=AJvgqjAITVM) [3:53]

Schar School of Policy and Government, “The Resurgent Chemical Weapons Threat: Current Challenges to the Chemical Weapons Convention,” November 17, 2020, <https://pandorareport.org/biodefense-events/upcoming-event-the-resurgent-chemical-weapons-threat-current-challenges-to-the-chemical-weapons-convention/>

## **PART 3: CURRENT AND FUTURE CHALLENGES**

### **WEEK 9 (3/18-3/24): Consequences of Nuclear Proliferation: The Case of South Asia**

Scott D. Sagan and Kenneth N. Waltz, *The Spread of Nuclear Weapons: An Enduring Debate, Third Edition* (New York: W.W. Norton, 2012), pp. 135-174 (Chapter 5: Indian and Pakistani Nuclear Weapons: For Better or Worse?).

Gregory D. Koblentz, *Strategic Stability in the Second Nuclear Age*, Special Report No. 71 (New York: Council on Foreign Relations, 2014), 14-18, 27-30. [https://cdn.cfr.org/sites/default/files/pdf/2014/11/Second%20Nuclear%20Age\\_CSR71.pdf](https://cdn.cfr.org/sites/default/files/pdf/2014/11/Second%20Nuclear%20Age_CSR71.pdf)

### **WEEK 10 (3/25-3/31): Russia and China: The Search for Strategic Stability**

Gregory D. Koblentz, *Strategic Stability in the Second Nuclear Age*, Special Report No. 71 (New York: Council on Foreign Relations, 2014), 3-12, 19-27. [https://cdn.cfr.org/sites/default/files/pdf/2014/11/Second%20Nuclear%20Age\\_CSR71.pdf](https://cdn.cfr.org/sites/default/files/pdf/2014/11/Second%20Nuclear%20Age_CSR71.pdf)

Michael Kofman and Anya Fink, “Escalation Management and Nuclear Employment in Russian Military Strategy,” *War on the Rocks*, June 23, 2020,

<https://warontherocks.com/2020/06/escalation-management-and-nuclear-employment-in-russian-military-strategy/>

Fiona S. Cunningham and M. Taylor Fravel, “Assuring Assured Retaliation: China’s Nuclear Posture and U.S.-China Strategic Stability,” *International Security*, Vol. 40, No. 2 (Fall 2015), pp. 7–50, doi:10.1162/ISEC\_a\_00215

### *Pre-Recorded Lectures on Blackboard*

Fiona Cunningham (George Washington University), “Maximizing Leverage: China’s Strategic Force Postures in the Information Age.”

Anya Fink (Center for Naval Analyses), “Russian Nuclear Strategy.”

## **WEEK 11 (4/1-4/7): Negotiating Nuclear Nonproliferation: The Case of Iran**

Robert Reardon, “Iran’s Nuclear Ambitions: Motivations, Trajectory, and Global Implications,” in Ashley J. Tellis, Abraham M. Denmark, and Travis Tanner, eds., *Strategic Asia 2013-14: Asia in the Second Nuclear Age* (Washington, DC: National Bureau of Asian Research, 2013), 201-230.

Mark Fitzpatrick, “Assessing the JCPOA,” in Mark Fitzpatrick, Michael Elleman and Paulina Izewicz, *Uncertain Future: The JCPOA and Iran’s Nuclear and Missile Programmes*, Adelphi series, Volume 57, Issue 466-467 (2017): pp. 19-60.

Mark Dubowitz, “Implications of a Nuclear Agreement with Iran,” Testimony Before the House Committee on Foreign Affairs, Washington, DC, July 23, 2015, 1-13, [https://s3.us-east-2.amazonaws.com/defenddemocracy/uploads/documents/Dubowitz\\_Testimony\\_HFAC\\_Implications\\_of\\_a\\_Nuclear\\_Agreement.pdf](https://s3.us-east-2.amazonaws.com/defenddemocracy/uploads/documents/Dubowitz_Testimony_HFAC_Implications_of_a_Nuclear_Agreement.pdf)

Eric Brewer, “A Clean Return to the Iran Nuclear Deal Should be Biden’s First Option,” *Bulletin of the Atomic Scientists*, January 11, 2021, <https://thebulletin.org/2021/01/a-clean-return-to-the-iran-nuclear-deal-should-be-bidens-first-option/>

### *Recommended Websites*

*The Deal* podcast: <https://www.middlebury.edu/office/deal-podcast>

U.S. Institute of Peace, “The Iran Primer,” <https://iranprimer.usip.org/>

Council on Foreign Relations (CFR), “What Is the Iran Nuclear Deal?” <https://www.cfr.org/backgrounder/what-iran-nuclear-deal>

Belfer Center for Science and International Affairs (BCSIA), “Iran Matters,” <https://www.belfercenter.org/iran-matters/overview/nuclear>

## **WEEK 12 (4/8-4/14): North Korea: Deterrence or Disarmament?**

Victor D. Cha and David C. Kang, *Nuclear North Korea: A Debate on Engagement Strategies* (New York: Columbia University Press, 2018), 1-11 (required), 12-69 (optional).

John S. Park, “Inside Multilateralism: The Six-Party Talks.” *Washington Quarterly*, vol. 28. no. 4. (Autumn 2005): 75-91.

Victor Cha, “Denuclearizing North Korea: Six Options for Biden,” *War on the Rocks*, December 22, 2020, <https://warontherocks.com/2020/12/denuclearizing-north-korea-six-options-for-biden/>

#### *Supplemental Resources*

38 North (Stimson Center): <https://www.38north.org/>

Beyond Parallel (CSIS): <https://beyondparallel.csis.org/>

### **WEEK 13 (4/15-4/21): Syria and Chemical Weapons**

Tobias Schneider and Theresa Lutkefend, *Nowhere to Hide: The Logic of Chemical Weapons Use in Syria* (Berlin: Global Public Policy Institute, 2019).

[https://www.gppi.net/media/GPPi\\_Schneider\\_Luetkefend\\_2019\\_Nowhere\\_to\\_Hide\\_Web.pdf](https://www.gppi.net/media/GPPi_Schneider_Luetkefend_2019_Nowhere_to_Hide_Web.pdf)

Philipp C. Bleek and Nicholas J. Kramer, “Eliminating Syria’s Chemical Weapons and Implications for Addressing Nuclear, Biological, and Chemical Threats Elsewhere” *Nonproliferation Review* (Summer-Fall 2016), pp. 197-230.

Gregory D. Koblentz, “Chemical-Weapon Use in Syria: Atrocities, Attribution, and Accountability,” *The Nonproliferation Review*, Vol. 26, No. 5/6 (2019), pp. 575-598.

#### *Supplemental Resources*

Senate Select Committee on Intelligence, “Syrian Chemical Weapons Use Videos,” September 5, 2013, <https://www.intelligence.senate.gov/syrian-chemical-weapons-use-videos> [13:27. Warning: These videos contain disturbing images of dead bodies, including children. VIEWER DISCRETION IS ADVISED]

“Syria's Scientific Studies and Research Center,” October 20, 2020, <https://storymaps.arcgis.com/stories/f353d0a2893e4396b9d82b9ba5458d69>

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