INTL 7010E:
TECHNICAL BACKGROUND FOR WMD NON-PROLIFERATION POLICY PRACTITIONERS
Fall 2025
Mondays, 12:40-3:50 PM

Walt Sansot: walt.sansot@uga.edu

Seminar Link: **INTL7010E**

Office Hours: Mondays 11:00 AM – 12:30 PM; Mondays 7:00 PM – 8:30 PM via Teams
(Please email to schedule an appointment)

COURSE DESCRIPTION:

This class is designed to introduce MIP ISN students to the WMD proliferation threats of concern and the methodologies that are used to assess the proliferation technology behind various types of WMDs and the associated technical requirements for an effective WMD non-proliferation policy. Specifically, it will explain why certain items are controlled and the challenges associated with maintaining such controls. The unique aspect of this course is that it will offer a STEM-based understanding of the issue area, an increasingly essential component in the competitive government/NGO job market.

This seminar will be taught virtually via Microsoft Teams, the link for each week's session is: **INTL7010E**. You will receive a calendar invitation from the instructor for the semester.

After this course, students will have acquired an understanding of technical topics related to WMD technology, including:

1. An overview of basic science for nuclear, biological, and chemical processes for social scientists
2. The nuclear fuel cycle including Uranium enrichment and Plutonium production and separation.
3. Chemical weapons agents and technology
4. Biological weapons agents and technology
5. Missile delivery systems
6. Emerging Technologies
7. Foundations of an effective strategic trade control system
8. Multilateral Export Control Regimes and their application for preventing proliferation.

TOPICAL OUTLINE FOR THE COURSE:

The course syllabus is a general plan for the course; deviations announced to the class by the professor may be necessary. A detailed course schedule and reading assignments can be found in the following pages, but a topical outline for the course includes lectures on the following:

1. Introduction of the course/ Overview of WMD Technology and global WMD non-proliferation efforts
2. Multilateral Export Control Regimes and the EU Control List
3. Nuclear Fuel Cycle Technologies
4. Nuclear Weapons Technology
5. Chemical Weapons Technology

6. Missile Systems Technology
7. Biological Weapons Technology
8. Emerging Technologies
9. Foundation of a Strategic Trade Control (STC) System

ATTENDANCE AND CLASS BEHAVIOR POLICY:
This class will be highly interactive. As such, class attendance, punctuality, and participation are required to succeed. Therefore:

- **Regular attendance** is expected. Two unexcused absences will be permitted, but the professor must be notified of each absence ahead of class. ½ final letter grade penalty will incur for each additional unexcused absence. Valid excuses include illness (doctor's note required) and family emergencies.

- **Punctuality** is a must. Late arrivals to class interrupt both your fellow students and your professor. If you have a situation where you will be habitually late, please notify the professor as soon as possible. Repeat latecomers will incur a ½ final letter grade penalty.

- **Each student is responsible for contributing to a positive learning environment**: students are expected to behave in a courteous, professional manner towards each other and towards the professor. While in class, students are expected not to fall asleep, carry on personal conversations, read the paper, use cellular phones/text, or complete assignments other than what the class is working on. If you engage in any of these behaviors, you may incur a ½ final letter grade penalty for each occurrence.

ASSIGNMENTS:
The course is assessed by four modules – outlined below. **You are responsible for assignments whether or not you are in class the day they are due.** Should you miss class and wish to receive credit for an assignment due that day, you are required to turn in the assignment to the professor **before class via email.** I will use the 100-point grading system. Students will receive a letter grade for their final grade according to the following cutoffs:
A≥93; A- ≥90; B+ ≥87; B ≥83; B- ≥80; C+ ≥76; C ≥70; C- ≥68; D ≥60; F <60

Reading assignments will be posted in eLC.

1. Topical Quizzes (25%)
There will be 2-3 topical quizzes throughout the semester. These will be announced ahead of time, which is why reading for every class is important, as well as mandatory attendance to each class. Quizzes will be performed online in eLC. **Students who do not complete quizzes during assigned time periods will receive a grade of zero for this assessment.**

2. Seminar Presentation (30%)
On the last day of class, students will present their end of semester presentations to the rest of the class. Presentations should be no more than 15 minutes long and should outline which of the issues discussed in class pose the biggest threat to U.S. and international security, and why. Specific issues areas will be assigned to the students at the beginning of the semester to avoid any repetition. **PowerPoint presentations need to be emailed to Mr.**

Sansot by 9AM on November 24th. Late submissions will result in a grade of zero for this assessment.

3. Policy Briefs (30%)
Brief 1: Students will prepare a brief that addresses **a historical WMD policy and technical challenge** – there are many from which to choose. Students may select any WMD-related policy issue that has an international dimension, but it must discuss both the policy and technical challenges. Additionally, students should address whether the policy approach used by said organization was correct and what they would have recommended for improved implementation. These double-spaced five (5) page briefs (not including linked citations) are to be written for persons that will be briefing the National Security Council (NSC) Chairman. You will be expected to (1) outline the technical and policy scope of the issue, (2) assess international implications, and (3) offer policy recommendations with justification.

- **Policy brief #1 is due in class on Monday, September 29th**

Brief #2: Students will prepare a three-page, double spaced (not including linked citations) policy brief that will be utilized to brief the POTUS on a recommended course of action pertaining to an emerging technology that poses a new proliferation threat.

- **Policy brief #2 is due in class on Monday, November 10th**

Policy papers should follow the format provided in INTL 6000. These assignments will be emailed to the professor prior to class on the day that they are due. Late submissions will result in a grade of zero for this assessment, unless cleared by Mr. Sansot.

4. Weekly Question and Class Participation (15%)
Active class participation is required. Students who are not presenting will be expected to keep up with the readings and to participate actively in the discussions. **Participation is based on class behavior, preparedness, and engagement with the material presented in class.**

All students will be required to come to class each week with one question to pose to the rest of the group about the week's topic. Questions should be emailed to the professor by 9:00 AM each Monday. The Subject Line should state "INTL 7010E Week 1 (or whatever week we are in) Student Question." Additionally, the professor may pose one question each week via eLC and students are expected to respond by the next classroom session. Additionally, students are to respond to at least one student response.

DEADLINES:
These deadlines are absolute – **NO EXTENSIONS ARE GIVEN**. Failure to turn in any of the assignments by the due date will result in a grade of zero for that assignment. To avoid a penalty for late submission of a paper, you must have evidence of extenuating circumstances (e.g., a doctor's note for illness). This must be submitted to the professor prior to the time of the deadline.

ACADEMIC HONESTY POLICY:
As a University of Georgia student, you have agreed to follow the University's academic honesty policy, "A Culture of Honesty," and the Student Honor Code. All academic work must meet the standards contained in "A Culture of Honesty" found at: https://honesty.uga.edu/. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Questions related to course assignments and the academic honesty policy should be directed to the professor.

RETURN OF GRADED BRIEFS
The aim is to return graded briefs within 2 weeks after the submission date. Papers will be returned to you with an indicative numerical grade, ranging from 0-100. **ONCE A GRADE IS AWARDED**, **UNDER NO CIRCUMSTANCE WILL IT BE CHANGED.**

FERPA
The Family Educational Rights and Privacy Act (FERPA) protects the privacy of your educational record. Please e-mail me to make an appointment during my office hours to discuss your grades should you have any questions or concerns. I will not discuss your grades in class.

Course Schedule and Deadlines:

Date	Week	Topic	Deliverable
8/18	1	Intro/ Overview of WMD Technology and global WMD non-proliferation efforts	Pre-Read Syllabus
8/25	2	Multilateral Export Control Regimes and the EU Control List	Weekly Question
9/1	3	Labor Day – No Class	
9/8	4	Introduction to the Nuclear Fuel Cycle	Weekly Question
9/15	5	Special Nuclear Material Production	Weekly Question
9/22	6	Plutonium Separations	Weekly Question
9/29	7	Nuclear Weapons Technology	Weekly Question/Policy Brief #1
10/6	8	Chemical Weapons Introduction	Weekly Question
10/13	9	Chemical Weapons Technology	Weekly Question
10/20	10	Missile Technology	Weekly Question
10/27	11	Biological Weapons Technology	Weekly Question
11/3	12	Emerging Technologies	Weekly Question

11/10	13	Foundations of Strategic Trade Control	Weekly Question/ Policy Brief #2
11/17	14	Dual Use Commodity Classification	Weekly Question
11/24	15	Final Presentations	
12/1	16	Final Presentations	

REQUIRED READINGS:

A list of readings has been provided for each week. Students are expected to read everything on the list since the readings will facilitate class discussion and enhance understanding of the topics covered in class. Students are expected to come prepared to class each week to discuss the issues raised from what they have read with their fellow students and instructor(s).

Books:

1. CBRN Protection: Managing the Threat of Chemical, Biological, Radioactive and Nuclear Weapons – Andre Richardt, Birgit Hulseweh, Bernd Niemeyer, Frank Sabath; ISBN 978-3-527-32413-2

2. Globalization and WMD Proliferation: Terrorism, Transnational Networks, and International Security – James A. Russell and James J. Wirtz, ISBN-978-0-415-433945

3. The Challenges of Nuclear Non-Proliferation - RICHARD DEAN BURNS AND HON. PHILIP E. COYLE III, ISBN-13: 978-1442223752, ISBN-10: 1442223758

4. Innovation, Dual Use, and Security: Managing Risks of Emerging Biological and Chemical Technologies – Jonathan B. Tucker ISBN-13 978-0-262-51696-9

Bonus Reading:

1. Peddling Peril: How the Secret Nuclear Trade Arms America's Enemies – David Albright, ISBN-13: 978-1476745763; ISBN-10: 1476745765
2. Preventing Black Market Trade in Nuclear Technology – Bunn, Malin, Potter, Spector, ISBN-13 978-1-107-16376-8
3. Illicit: How Smugglers, Traffickers and Copycats Are Hijacking the Global Economy – Moises Naim, ISBN-13: 978-1400078844; ISBN-10: 1400078849

CLASS READING ASSIGNMENTS:

Week 1: Introduction and Overview of WMD Technology

Required Reading:

- Book: CBRN Protection; Chapter 1
- Video: "Nuclear Tipping Point" (54 minutes): https://vimeo.com/20532059
- Text of the NPT: https://www.armscontrol.org/treaties/nuclear-nonproliferation-treaty
- Text of the BWC: https://www.armscontrol.org/treaties/biological-weapons-convention
- Text of the CWC: https://www.armscontrol.org/treaties/chemical-weapons-convention

Suggested Reading:

- Wisconsin Project: https://www.wisconsinproject.org/
- 26 Countries' WMD Programs; A Global History of WMD Use: http://usiraq.procon.org/view.resource.php?resourceID=000678
- IAEA Safeguards Serving Nuclear Non-Proliferation, June 2015: https://www.iaea.org/sites/default/files/safeguards_web_june_2015_1.pdf
- Fact Sheets: Treaty Membership and Signatory Status of NPT, CWC, BWC: http://www.armscontrol.org/factsheets/treatymembership

Please read the syllabus and come to week 1's class with any questions you may have about the syllabus and the class

Week 2: Multilateral Export Control Regimes and the EU List

Required Reading:

- Book: CBRN Protection: Chapter 2
- The Missile Technology Regime: https://mtcr.info/mtcr-guidelines/; https://mtcr.info/wordpress/wp-content/uploads/2019/10/MTCR-TEM-Technical_Annex_2019-10-11-1.pdf
- Multilateral Export Control Policy: The Coordinating Committee: http://www.princeton.edu/~ota/disk3/1979/7918/791810.PDF
- Nuclear Suppliers Group: https://www.nuclearsuppliersgroup.org/en/guidelines; https://www.nuclearsuppliersgroup.org/en/nsg-documents
- Australia Group: http://australiagroup.net/en/; https://australiagroup.net/en/controllists.html
- Wassenaar Arrangement: https://www.wassenaar.org/

Suggested Reading:

- Nuclear Nonproliferation Regime: Are New Institutions Needed?; Hasan SAYGIN, Özüm Sezin UZUN (pdf)

Week 3: No Class, but lots of READING!

Required Reading:

- Book: Globalization and WMD Proliferation: Terrorism, Transnational Networks, and International Security
- NRC Fact Sheet on Dirty Bombs, December 2012: http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-dirty-bombs.html
- Ramesh Thakur, Jane Boulden, and Thomas G. Weiss, "Can the NPT Regime be fixed or should it be abandoned?", *Dialogue on Globalization*, Occasional Papers No. 40, October 2008: http://library.fes.de/pdf-files/iez/global/05760.pdf
- Sybille Bauer and Mark Bromley, "The Dual-Use Export Control Policy Review: Balancing Security, Trade, and Academic Freedom in a Changing World," EU Non-Proliferation Consortium Non-Proliferation Papers, No. 48, March 2016: https://www.sipri.org/sites/default/files/EUNPC_no-48.pdf
- Mark Hibbs, "Toward a Nuclear Suppliers Group Policy for States Not Party to the NPT," Carnegie Endowment for International Peace, February 12, 2016: http://carnegieendowment.org/2016/02/12/toward-nuclear-suppliers-group-policy-for-states-not-party-to-npt/itxg

Suggested Reading:

- Kenneth Katzman and Paul K. Kerr, "Iran Nuclear Agreement," Congressional Research Service, May 31, 2016: http://fas.org/sgp/crs/nuke/R43333.pdf
- Text of the JCPOA: http://www.iaea.org/sites/default/files/gov-2015-72-derestricted.pdf
- George Perkovich, Mark Hibbs, James M. Acton, and Toby Dalton, "Parsing the Iran Deal": http://carnegieendowment.org/2015/08/06/parsing-iran-deal/iec5
- Proliferation Security Initiative: http://www.state.gov/t/isn/c10390.htm
- David Ivey, "Perspectives on Challenges/Problems in Export Control Compliance," October 29, 2015: http://sites.nationalacademies.org/cs/groups/pgasite/documents/webpage/pga_169005.pdf
- Stephanie Lieggi and Diana Lee, "Tracking Growth in Dual Use Commodities in Southeast Asia: Keeping Ahead of Proliferation Networks," May 20, 2015: http://www.nonproliferation.org/tracking-growth-dual-use-commodities/

Week 4: Nuclear Principles/ Introduction to the Nuclear Fuel Cycle

Required Reading:

- Book: CBRN Protection, Chapter 5
- Basic Nuclear Principles (pdf)
- The Nuclear Fuel Cycle Overview – World Nuclear Association: http://www.world-nuclear.org/information-library/nuclear-fuel-cycle/introduction/nuclear-fuel-cycle-overview.aspx
- Stages of the Nuclear Fuel Cycle, NRC: http://www.nrc.gov/materials/fuel-cycle-fac/stages-fuel-cycle.html
- Radiation Protection, NRC: http://www.nrc.gov/about-nrc/radiation.html

Week 5: Special Nuclear Material Production

Required Reading:

- Uranium Enrichment, NRC: http://www.nrc.gov/materials/fuel-cycle-fac/ur-enrichment.html
- Uranium Enrichment, World Nuclear Association: http://www.world-nuclear.org/information-library/nuclear-fuel-cycle/conversion-enrichment-and-fabrication/uranium-enrichment.aspx
- Nuclear Reactors, U.S. ATOMIC ENERGY COMMISSION (pdf)
- Plutonium Manufacturing and Fabrication: http://nuclearweaponarchive.org/Library/Plutonium/

Suggested Reading:

- How uranium ore is made into nuclear fuel, World Nuclear Association: http://www.world-nuclear.org/nuclear-basics/how-is-uranium-ore-made-into-nuclear-fuel.aspx
- Nuclear Proliferation and Safeguards, Office of Technology Assessment, June 1977: http://www.princeton.edu/~ota/disk3/1977/7705/7705.PDF
- Technical Description of Fuel Cycle Facilities and Evaluation of Diversion Potential: http://www.princeton.edu/~ota/disk3/1977/9586/958607.PDF

Week 6: Plutonium Separations

Required Reading:

- Plutonium and Reprocessing Spent Fuel, Frank N. von Hippel, Science, 2001
- Plutonium Separation in Nuclear Power Programs, International Panel of Fissile Materials
- Separation of Plutonium from Irradiated Fuels and Targets, Lawrence Livermore National Laboratory
- Plutonium, Argonne National Laboratory

Suggested Reading:

- Processing of Used Nuclear Fuel. World Nuclear Association: http://www.world-nuclear.org/information-library/nuclear-fuel-cycle/fuel-recycling/processing-of-used-nuclear-fuel.aspx
- Kelsey Hartigan, Corey Hinderstein, Andrew Newman, Sharon Squassoni, "A New Approach to the Nuclear Fuel Cycle: Best Practices for Security, Nonproliferation, and Sustainable Nuclear Energy," CSIS/NTI, February 2015: http://www.nti.org/media/pdfs/150320_Squassoni_NuclearFuelCycle_Web_final.pdf?_=1426863720
- Civilian HEU Reduction and Elimination Resource Collection, NTI: http://www.nti.org/analysis/reports/civilian-heu-reduction-and-elimination/
- William F. Shughart II, "Why Doesn't U.S. Recycle Nuclear Fuel?" *Forbes*, October 1, 2014: http://www.forbes.com/sites/realspin/2014/10/01/why-doesnt-u-s-recycle-nuclear-fuel/#3691456c7db4
- Nuclear Reprocessing: Dangerous, Dirty, and Expensive, Union of Concerned Scientists: http://www.ucsusa.org/nuclear-power/nuclear-plant-security/nuclear-reprocessing#.V3K41Vfw8RF
- George Perkovich, Jessica T. Mathews, Joseph Cirincione, Rose Gottemoeller, Jon B. Wolfsthal, *Universal Compliance: A Strategy for Nuclear Security*, March 2005: http://www.nti.org/media/pdfs/analysis_carnegie_universalcompliance_2005.pdf?_=1316466791

Week 7: Nuclear Weapons Technology

Readings:

- "CTBT at 25 and Beyond"; Francesca Giovannini, Arms Control Association, September 2021: The CTBT at 25 and Beyond | Arms Control Association
- Text of the CTBT: http://www.armscontrol.org/node/2491
- Nuclear Testing Fact Sheets: http://www.armscontrol.org/factsheets/nucleartesting
- How to Detect a Secret Nuclear Test (<4 minute video): https://www.youtube.com/watch?v=daZ7lQFqPyA

Week 8: Chemical Weapons Introduction

Readings:

- CBRN Protection: Chapters 3 and 7
- OPCW Scheduled Chemicals: https://www.opcw.org/chemical-weapons-convention/annexes/annex-on-chemicals/

Suggested Reading:

- CWC Effects on the Chemical Industry, OTA (pdf)
- Sarah Everts, "When Chemicals Became Weapons of War": http://chemicalweapons.cenmag.org/when-chemicals-became-weapons-of-war/
- Sarah Everts, "Who was the Father of Chemical Weapons?": http://chemicalweapons.cenmag.org/who-was-the-father-of-chemical-weapons/

- Chemical Weapons Then and Now: http://cen.acs.org/content/dam/cen/93/8/09308-cover3timeline.pdf
- Elaine Seward and Sarah Everts, "How Chemistry Changed WWI": http://chemicalweapons.cenmag.org/how-chemistry-changed-wwi/
- First-hand Accounts of the First Chlorine Gas Attack: http://chemicalweapons.cenmag.org/first-hand-accounts-of-the-first-chlorine-gas-attack/
- Jonathan B. Tucker, "Trafficking Networks for Chemical Weapons Precursors: Lessons from the Iran-Iraq War of the 1980s," CNS Occasional Paper No. 13, November 2008: http://cns.miis.edu/opapers/pdfs/op13_tucker_edited.pdf

Week 9: Chemical Weapons Technology

Required Reading:

- Australia Group Chemical Equipment Control List: Chemical Weapons Precursors: http://www.australiagroup.net/en/precursors.html
- World Customs Organization Strategic Trade Control Enforcement Implementation Guide – **p.41-42**: www.wcoomd.org/en/topics/enforcement-and-compliance/instruments-and-tools/guidelines/wco-strategic-trade-control-enforcement-implementation-guide.aspx
- Australia Group Chemical Equipment Control List: http://www.australiagroup.net/en/dual_chemicals.html

Suggested Reading:

- Book: *Innovation, Dual Use, and Security: Managing the Risks of Emerging Biological and Chemical Technologies*, Cambridge: p. 235-248., Jonathan B. Tucker, ed.
- Mary Beth D. Nikitin, Paul K. Kerr, Andrew Feickert, "Syria's Chemical Weapons: Issues for Congress," Congressional Research Service, September 30, 2013: http://www.fas.org/sgp/crs/nuke/R42848.pdf
- Christopher M. Blanchard, Carla E. Humud, Mary Beth D. Nikitin, "Armed Conflict in Syria: Overview and U.S. Response," Congressional Research Service, October 9, 2015: http://www.fas.org/sgp/crs/mideast/RL33487.pdf (p.25-27)
- Jannis Brühl, "Where Did Syria's Chemical Weapons Come From?" *ProPublica*, September 25, 2013: https://www.propublica.org/article/where-did-syrias-chemical-weapons-come-from
- Iraq Survey Group: Comprehensive Report of the Special Advisor to the DCI on Iraq's WMD, 30 September 2004, Volume III of III: https://www.gpo.gov/fdsys/pkg/GPO-DUELFERREPORT/pdf/GPO-DUELFERREPORT-3.pdf

Week 10: Missile Technology

Required Reading:

- MTCR Annex: https://mtcr.info/wordpress/wp-content/uploads/2017/10/MTCR-Handbook-2017-INDEXED-FINAL-Digital.pdf
- Ballistic and Cruise Missile Threat, Defense Intelligence Ballistic Missile Intelligence Committee (pdf)
- Karl Tate, "How Intercontinental Ballistic Missiles Work (Infographic)", Space.com, February 1, 2013: http://www.space.com/19601-how-intercontinental-ballistic-missiles-work-infographic.html

Suggested Reading:

- "Missile Technology Control Regime Reform: Key Changes and Next Steps", Aerospance Security. Wilson and Swope, Missile Technology Control Regime Reform: Key Changes and Next Steps - Aerospace Security.
- Kelsey Davenport, "Iran's Missile Tests Raise Concerns," *Arms Control Association*, April 2016: http://www.armscontrol.org/ACT/2016_04/News/Irans-Missile-Tests-Raise-Concerns
- Kelsey Davenport, "Worldwide Ballistic Missile Inventories," *Arms Control Association*, August 2023: http://www.armscontrol.org/factsheets/missiles
- Trajectories: http://hyperphysics.phy-astr.gsu.edu/hbase/traj.html
- HyperPhysics Concepts: http://hyperphysics.phy-astr.gsu.edu/hbase/hph.html#mechcon

Week 11: Biological Weapons Technology

Required Reading:

- CBRN Protection Chapters 4 and 8
- Australia Group Common Control Lists: Human and Animal Pathogens and Toxins: http://www.australiagroup.net/en/human_animal_pathogens.html
- Australia Group Common Control Lists: Plant Pathogens: http://www.australiagroup.net/en/plants.html
- Australia Group Common Control Lists: Control List of Dual-Use Biological Equipment and Related Technology and Software: http://www.australiagroup.net/en/dual_biological.html
- "Opportunities to Strengthen U.S. Biosecurity from AI-Enabled Bioterrorism: What Policymakers Should Know", Center for Strategic and International Studies, Adamson and Allen, Aug 6, 2025. Opportunities to Strengthen U.S. Biosecurity from AI-Enabled Bioterrorism: What Policymakers Should Know

Suggested Reading:

- Book: *Innovation, Dual Use, and Security: Managing the Risks of Emerging Biological and Chemical Technologies*, Cambridge: p. 235-248., Jonathan B. Tucker, ed.
- V. Barras, G. Greub, "History of Biological Warfare and Bioterrorism," *Clinical Microbiology and Infection*, Vol. 20, Issue 6, June 2014: 497-502: http://www.sciencedirect.com/science/article/pii/S1198743X14641744

- Capabilities Analysis of Bioterrorism: Roadblocks Facing Non-State Actors' Use of Bioweapons, *Global Biodefense*, May 20, 2014: http://globalbiodefense.com/2014/05/20/bioterrorism-roadblocks-facing-non-state-actors-use-of-bioweapons/
- Michael J. Selgelid, "Governance of Dual-Use Research: An Ethical Dilemma," *Bulletin of the World Health Organization* 2009, 87: 720-723: http://www.who.int/bulletin/volumes/87/9/08-051383/en/

Week 12: Emerging Technologies

Required Reading:

- Innovation Dual Use and Security, Chapters 1-4
- Reviewing Controls for Certain Emerging Technologies, Federal Register / Vol. 83, No. 223 / Monday, November 19, 2018 (pdf)
- Optimizing Export Controls for Critical and Emerging Technologies, CSIS, Reinsh, Benson, Denamiel, Putnam (pdf)
- STR 01, Autumn 2015; 02 3D Printing: A Challenge to Nuclear Export Controls; Christopher
- STR 06, Spring/Summer 2016; 01 – Drafting, Implementing, and Complying with Export Controls: The Challenge Presented by Emerging Technologies; Brockman
- STR 09, Winter/Spring 2019; 02 – Disrupting Export Controls: Emerging and Foundational Technologies and Next Generation Controls, Jones
- STR 09, Winter/Spring 2019; 03 – Emerging Technologies and Competition in the Fourth Industrial Revolution: The Need for New Approaches to Export Control, Dekker and Okano-Heijmans
- Rand: http://proxy-remote.galib.uga.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=1604235&site=ehost-live&ebv=EB&ppid=pp_Cover, chapters 1-5

Suggested Reading:

- TBD

Week 13: Foundations of Strategic Trade Control

Required Reading:

- WCO Strategic Trade Control Enforcement Guide; downloadable at: http://www.wcoomd.org/en/topics/enforcement-and-compliance/instruments-and-tools/guidelines/wco-strategic-trade-control-enforcement-implementation-guide.aspx
- Strategic Trade Review 01 – 01 Defining Effective Strategic Trade Controls at the National Level; Dill and Stewart
- STR 03, Autumn 2016; 02 – Free Zones and Strategic Trade Controls, Viski and Michel,
- Strategic Trade Review 10-11 – A Strategic Trade Control Systems Model; Heine, Blackburn, Hamling.
- Complying by Denying: Explaining Why States Develop Nonproliferation Export Controls; Stinnett, etal., http://www.jkarreth.net/files/stinnett.etal.2011.pdf

Week 14: Dual Use Commodity Classification

Required Reading:

- **None!**

Week 15: Final Presentations

Week 16: Final Presentations

Presentations should be no more than 15 minutes long and should outline which of the issues discussed in class pose the biggest threat to U.S. and international security, and why. **PowerPoint presentations need to be emailed to Mr. Sansot by 9AM on 11/27. Late submissions will result in a grade of zero for this assessment.**