

PLSC 380I - Nuclear Arms Control & Non-proliferation

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Welcome to Nuclear Arms Control & Non-proliferation! Hopefully you are as intrigued and perplexed by the development and continued existence of nuclear weapons as I am. My interest in this topic first developed when I was in your place taking classes as an undergraduate student. I went on to work for several international governments within the European Union researching defense related issues before transitioning back to academia where I find myself now.

Course Description

This is a course in international security which begins by discussing the global international system prior to 1945 then focuses on the transformation of the international security climate with the proliferation of nuclear weapons. The emergence of nuclear weapons altered the world and pose a threat to: traditional military power, global peace and security, balance of power among states, and the prestige and influence of states. The proliferation of nuclear weapons raises two main questions: the existential question – how do we live with them or can we eliminate them, and the question of proliferation – can their ownership be limited or contained?

The course will track: the creation of nuclear weapons, first attempts to control and eliminate them (beginning in 1946), President Eisenhower's "Atoms for Peace" speech in 1953, the establishment of international monitoring systems (establishment of the International Atomic Energy Agency (IAEA) in 1954, President Kennedy's warning about the proliferation of nuclear weapons in 1961, the promulgation of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) in 1968, the Cold War and the nuclear arms race, successive treaties seeking to control nuclear tests, and the US/Russia nuclear weapons limitation and disarmament treaties.

The remainder of this course will then focus on contemporary problems stemming from the continued existence of nuclear weapons: the effectiveness of international treaty law, the non-signatory states, the 'breakout' states, the role of international institutions like the IAEA and UN Security Council, and finally the prospect of nuclear terrorism by non-state actors.

In this course, students should prepare to think deeply about the following questions: What purpose do nuclear weapons serve? Are they usable? Why have and do states acquire them? Are they in fact different from other weapons or simply more powerful? Have they made catastrophic war more or less likely? Are they permissible under international law?

General Education Information

C Requirement (Composition) This course also fulfills a Harpur College composition requirement. Students will need to show understanding of course materials through formal academic writing. This designation requires a process of revision and a minimum of 20 pages of writing. Students will need to effectively demonstrate critical thinking by advancing sound arguments with clearly defined hypotheses, arguments, and conclusions all of which must be appropriate to widely accepted practices in the discipline. This designation requires that 50 percent of the course grade is based on student writing.

G Requirement (Global Interdependencies) This course fulfills a G requirement. This course will study how multiple distinct world regions have influenced and interacted with one another and how such interactions have been informed by their respective cultures or civilizations.

N Requirement (Social Science) This course also fulfills a N requirement. Students will learn major concepts, models and issues of political science. They will gain an understanding of the methods used by social scientists to explore social phenomena including, when appropriate to the discipline, observation, hypothesis development, measurement and data collection, experimentation, evaluation of evidence, and employment of mathematical and interpretive analysis.

Communication Policy

Technology has made it vastly easier to communicate. Please take advantage of this. You are encouraged to contact me by e-mail. I will respond promptly, attempting to do so within one business day. It is still however important for students to plan ahead and not leave work to the last minute. Doing so will risk my not seeing your message until it is too late. Any course announcements will be made using the MyCourses announcement system.

Assignments

Briefing Memos (50%): A key component of this course is the development of a briefing memo. This memo will be a minimum of 10 pages of expository writing and will go through two revisions based upon peer and faculty review. Each version will account for 25% of a student's final grade, in total this would comprise 50% of the final grade. Revisions of the briefing memo assignments will focus on argument creation, essay structure, persuasiveness, evidence application, grammar, and tone. The purpose of these memos is to push you to provide clear factual evidence in response to a prompt and then enhance this with a persuasive policy focus recommendation. These essays provide a framework to aid your composing creative feasible policy recommendations that capture a reader's attention, make a clear policy recommendation, provide case or data driven evidence, and outline steps for adoption.

Peer Evaluations (15%): Peer evaluations of written work provide useful opportunities to self-assess as well as gain critical feedback. Following the submission of individual memo drafts each student will be assigned a peer reviewer to whom they must submit their draft. Upon receiving a peer's draft, each student will provide critical substantive feedback on the draft's strengths, weakness, opportunities for improvement, and policy recommendation threats to success. These peer evaluations must be completed within 48 hours of the draft submission deadline and returned to the student author and course instructor.

Discussion Participation (25%): You will be expected to have completed your reading assignments each week and to actively join in our online forum to discuss them. This course has no set number of posts per week. You will be graded on the depth and thoughtfulness of your comments not the volume. Some weeks you will be asked to answer specific prompts/questions, and other weeks you will be asked to seek out additional material and share this with the class. The two best rules to consider when posting to the discussion forum are "Will this comment further substantive and supportive discussion amongst my classmates?" and "Does this comment provide insight into the material?"

Current Events Short-answer Essays (10%): To ensure we all stay up-to-date with current events related to nuclear arms and non-proliferation, during Modules 2 and 3 students will collect a current (within the last two months) news story and provide a three-page summary of the events detailed in the article. In total two essays will be drafted each worth 5% of your final grade. This summary should discuss the impact of these events for the country/region mentioned and its broader impact to global security. You are being asked to not only assess the news but also to critically explain/theorize what impact these events might have. Be reasonable, feasible, but creative with your analysis. Don't forget to include a reference to the original article you selected in your essay.

Grading

Grades in this course will be determined based on written work and participation (both in weekly discussion of assigned material and peer evaluation of written work which will be evaluated by both the instructor and your classmates).

Class participation is a very important part of the learning process in this course. You will be rewarded with a perfect score as long as you actively contribute to the class discussion. You will be evaluated on the QUALITY of your contributions and insights. Quality comments possess one or more of the following properties:

- Offers a different and unique, but relevant, perspective;
- Contributes to moving the discussion and analysis forward;
- Builds on other comments;
- Transcends the "I feel" syndrome. That is, it includes some evidence, argumentation, or recognition of inherent tradeoffs. In other words, the comment demonstrates some reflective thinking.

Your grade in this course will be computed on a 100-point scale as follows: 95-100 = A; 91-94 = A-; 88-90 = B+; 84-87 = B; 81-83 = B-; 78-80 = C+; 74-77 = C; 71-73 = C-; 65-70 = D; 0-64 = F. You will receive a letter grade on your written work which corresponds to numeric grades as follows: A = 100; A- = 94; B+ = 89; B = 85; B- = 82; C+ = 79; C = 75; C- = 72; D = 67; F = 50. You will receive a numeric grade on participation, assignments and presentations.

Accessing Grades

You will be able to access assignment grades on Blackboard. In accordance with Binghamton University's policies no grade related information will be sent via email. If you are unsatisfied with the grade you received on an assignment, you may write a memorandum explaining your concerns and requesting that your grade be evaluated. You should submit your memo to me along with a copy of the graded assignment within 48 hours of the grade having been posted. Once I have read and considered your request, I will respond to your concerns in writing.

Course Policies

Late Policy

Technical problems do occur unexpectedly. Students should have a backup plan should home or office internet access be interrupted and should keep copies of presentations, assignments, posts, and emails in a safe place. Late assignments will not be accepted. Excuses, including those involving computer problems, will not be accepted. It is your responsibility along with your groupmates to make sure that all assignments and presentations are on time.

Medical Emergencies

A doctor's note does not automatically excuse students from assignments, presentations, or exams. Students with a true medical emergency should notify the instructor as soon as possible regarding the situation. Colds and the flu are not medical emergencies. Acceptance of a medical excuse is at the discretion of the instructor.

Academic Integrity

Binghamton University provides explicit guidelines in the Student Academic Honesty Code (<http://www2.binghamton.edu/watson/about/academic-honesty.html>). I expect the work you submit for grading to be yours and yours alone. Not acknowledging another's work with proper references, taking credit for someone else's work, letting your work appear in another student's paper, or fabricating "results" are grounds for failing the assignment and/or the course in addition to any penalty imposed by the university. If you have any questions about what constitutes plagiarism or cheating, please ask me. You may also find the library's tutorials on academic honesty useful to review (Tutorials on academic honesty can be found at <http://library.binghamton.edu/research/tutorials/WebTutorials/web/index.html>).

Disability-Related Equal Access Accommodations

Students wishing to request academic accommodations to insure their equitable access and participation in this course should notify me by the end of week one. Authorizations from Services for Students with Disabilities (SSD) are required and I encourage you to contact SSD in UU-119 to schedule an appointment with the Director or Learning Disabilities Specialist. Their website (www.binghamton.edu/ssd) includes information regarding their Disability Documentation Guidelines.

Campus Help for Students

Library Resources - The Binghamton University Library offers a wide variety and range of services including research assistance, instruction, user-friendly interfaces, digital scanners and resources sharing. You will be responsible for locating several required readings throughout the semester. If you have not yet had to do this the best place to start is: <http://www.binghamton.edu/libraries>

University Tutoring Services - UTS offers free tutoring for undergraduate students at Binghamton University. All UTS tutoring appointments must be scheduled online through TutorTrac at tutortrac.binghamton.edu. Students log in using their PODS username and password. Walk-in tutoring is also available for select courses. If you have any questions about UTS, call 607-777-9235, email uts@binghamton.edu, or visit the website: <http://www.binghamton.edu/tutoring>.

Resources for Students in Distress. If you are experiencing undue personal or academic stress at any time during the semester or need to talk with someone about a personal problem or situation, I encourage you to seek support. I am available to talk with you about stresses related to your work in my class. However, problems with relationships, family worries, loss, or a personal struggle or crisis may require additional professional support. Binghamton University provides a variety of support resources:

- Dean of Students Office: 607-777-2804
- Decker Student Health Services Center: 607-777-2221
- University Police: On campus emergency, 911
- University Counseling Center: 607-777-2772
- Interpersonal Violence Prevention: 607-777-3062
- Harpur Advising: 607-777-6305
- Office of International Student & Scholar Services: 607-777-2510

Topic Outline/Schedule

Module 1: Creation and Development of Nuclear Weapons

ASSIGNMENT(S)

- *Initial Briefing Memo (Due Dec 21st)*
- *Peer Evaluation (Due Dec 23rd)*
- *Active Participation on the Discussion Board*

REQUIRED READINGS & ACTIVITIES

- History of Nuclear Weapons (*READ 1945-1992 portion only*)
- WATCH 'The Bomb' PBS Documentary
- Einstein's Letter to Roosevelt (1939)
- Eisenhower 'Atoms for Peace' Speech (1953)
- Kennedy UN Speech (1961)
- WATCH Doomsday Clock: Explained
- Butler, Richard. "Fatal Choice" pp.19-25

SUGGESTED MATERIALS

- WATCH - If You Detonated a Nuclear Bomb in the Marianas Trench
- WATCH - Nuclear Testing Time-lapse
- Blakemore, Erin. (2018) "Bill Clinton Once Struck a Nuclear Deal with North Korea." History.com
- Little, Becky. (2018) "How America Jump-Started Iran's Nuclear Program." History.com
- Aksenov, Pavel (2013) "Stanislav Petrov: The Man Who may have Saved the World." BBC News. <<https://www.bbc.com/news/world-europe-24280831>>.
- Hersey, John (1946) "Hiroshima." *The New Yorker* <<https://www.newyorker.com/magazine/1946/08/31/hiroshima>>.

Module 2: **Legal Framework and Structures of Non-proliferation**

ASSIGNMENT(S)

- *Short Answer - Current Events Essay #1 (Due Jan 8th)*
- *Active Participation on the Discussion Board*

REQUIRED READINGS & ACTIVITIES

International Controls & Limitation Treaties (read all overviews & skim treaty text)

- IAEA History
- IAEA Statute (skim)
- ICJ Advisory Opinion
- SALT Overview and Text
- START Overview and Text
- INF Overview and Text
- NPT Overview and Text
- PTBT Text
- CTBT Overview
- NewSTART Overview and Text

Free Zones (read all and watch for what changes over time)

- NWFZs Overview
- Antarctica Treaty
- Bangkok Treaty
- Tlatelolco Treaty
- Pelindaba Treaty
- Semipalatinsk Treaty
- Mongolia Overview and Treaty

Module 3: **Contemporary Problems**

ASSIGNMENT(S)

- *Revised Briefing Memo (Due Jan 11th)*
- *Short Answer - Current Events Essay #2 (Due Jan 15th)*
- *Active Participation on the Discussion Board*

REQUIRED READINGS & ACTIVITIES

- Cohen, Avner and Thomas Graham Jr. "An NPT for non-member." *Bulletin of the Atomic Scientists*. May/June 2004.
- Pinker, Steven. 2011. *The Better Angels of our Nature: Why Violence has declined*. Viking Penguin. pp. 268-278.
- Stoutland, Page and Samantha Pitts-Kiefer. "Nuclear Weapons in the new Cyber Age: Report of the Cyber-Nuclear Weapons Study Group." *Nuclear Threat Initiative*. September 2018.
- Ayson, Robert. (2010) "After a Terrorist Nuclear Attack: Envisaging Catalytic Effects." *Studies in Conflict & Terrorism*. 33:571-593.
- Shultz, George, William Perry, Henry Kissinger, and Sam Nunn. "Toward a World without Nuclear Weapons: The groundbreaking *Wall Street Journal* op-ed series." *Nuclear Threat Initiative*.
- "Nuclear smuggling deals 'thwarted' in Moldova." *BBC News* 7 October 2015. <<https://www.bbc.com/news/world-europe-34461732>>.
- "Russia won't be dragged into new arms race, but will respond to US withdrawal from INF – Putin." *RT* 20 November 2018. <<https://www.rt.com/news/444394-putin-russia-inf-arms-race/>>.
- "Russia may deploy missiles on allies' territory." *The Detroit News* 22 November 2018. <<https://www.detroitnews.com/story/news/world/2018/11/22/russia-may-deploy-missiles-allies-territory/38586593/>>.
- "U.S.-Russia Test Site Transparency Measures." *National Threat Initiative*. <<https://www.nti.org/analysis/articles/us-russia-test-site-transparency-measures/>>.

- WATCH – Nuclear Tipping Point Film (35-minute version)
<<https://www.nti.org/about/projects/nuclear-tipping-point/nuclear-tipping-point-watch/>>.

SUGGESTED MATERIALS

- Kristensen, Hans and Robert Norris. (2016) "China nuclear forces, 2016." *Bulletin of the Atomic Scientists*. 72: 205-211.
- Kristensen, Hans and Robert Norris. (2008) "France nuclear forces, 2008." *Bulletin of the Atomic Scientists*. 64: 52-54.
- Kristensen, Hans and Robert Norris. (2017) "Indian nuclear forces, 2017." *Bulletin of the Atomic Scientists*. 73: 205-209.
- Kristensen, Hans and Robert Norris. (2014) "Israeli nuclear forces, 2014." *Bulletin of the Atomic Scientists*. 70: 97-115.
- Kristensen, Hans and Robert Norris. (2016) "Pakistani nuclear forces, 2016." *Bulletin of the Atomic Scientists*. 72: 368-376.
- Kristensen, Hans and Robert Norris. (2017) "Russian nuclear forces, 2017." *Bulletin of the Atomic Scientists*. 73: 115--126.
- Kristensen, Hans and Robert Norris. (2011) "British nuclear forces, 2011." *Bulletin of the Atomic Scientists*. 67: 89-97.
- Kristensen, Hans and Robert Norris. (2017) "United States nuclear forces, 2017." *Bulletin of the Atomic Scientists*. 73: 48-57.