RPOS 479Z: Weapons of Mass Destruction and International Security

Professor: Bryan R. Early  
Class Times: MWF 9:20-10:15 AM  
Room: LC 12  
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Office Hours: Uptown, Humanities Building B16 – Monday, 10:20 AM -11:30AM

Course Description

This course provides an overview of the threats posed to national and international security by chemical, biological, radiological, and nuclear weapons. Students will learn why these weapons should not all be considered “weapons of mass destruction” through exploring the risks and consequences of their use by state and non-state actors. The course will do this by delving into the technical and policy challenges related to these weapons’ construction. It will further address how CBRN weapons shape countries’ national security strategies and regional security dynamics. Efforts at the international level to restrict the use and proliferation of these weapons will also be explored. Students will be given three writing assignments throughout the semester, including a major research paper on a related topic of their choice.

Expectations

This is a reading intensive course. Students are expected to attend every class having done the assigned reading and prepared to discuss the assigned texts. Attendance is mandatory and will be incorporated into students’ participation grades. Students will be expected to turn in assigned work on time. Late work will face significant deductions.

Course Objectives

By the end of the semester, students should be able to:

- Describe the major technical challenges involved in the construction of chemical, biological, radiological, and nuclear (CBRN) weapons
- Identify what makes certain types of CBRN weapons more effective for state actors and what makes certain types more effective for non-state actors
- Explain the major issues surrounding the proliferation of nuclear weapons and the role they play in international security
- Explain the nature of the threat posed by CBRN terrorism
- Discuss the regional security issues posed by nuclear weapons and the international efforts to prevent proliferation
- Apply their knowledge of CBRN issues to understanding contemporary events
Grading

Participation – 20%

Participation will be evaluated based upon the quality and regularity of students’ contributions to course discussions and the class debates. The instructor reserves the right to give pop quizzes that will factor into the participation grade if deemed necessary. Attendance will be factored into this grade.

Getting the Bomb Paper – 10%

Students will write a 4-6 page paper on the major obstacles that states must overcome to acquire a military nuclear program capable of producing atomic bombs. Students should write this paper from a contemporary perspective. The paper should address the technical challenges, domestic political issues, and international political issues that may serve as obstacles for states’ efforts to acquire atomic bombs. The use of real-world examples is encouraged. Due: 3/4.

Pick Your Poison Brief – 10%

Students will write a 3-4 page brief paper on a chemical or biological weapons agent. This brief should be considered a primer for high-level policymakers on the particular agent, providing them with a summary description of the agent, the military and terrorism threat it poses, and the preparations the government should undertake to redress that threat. Due: 4/1.

Research Paper – 35%

Students will write a 15-20 page research paper on a topic related to CBRN weapons, CBRN terrorism, international arms control or nonproliferation efforts, or regional security involving CBRN weapons. Students will submit their topics to the instructor for initial feedback and a rough draft of their papers to receive comments from a peer in class. Students will be expected to incorporate this feedback within their projects. The final draft will be evaluated by the instructor on its quality and the depth of the improvement made by the student from his or her initial draft.

**Topic Selected:** Due: 2/25

**Rough Draft (5%):** Due: 4/17

**Peer Review (5%):** Due: 4/24

**Final Draft (25%):** Due: 5/4

Final Exam – 25%

This will be a cumulative exam that will cover the entire semester’s course material. It will be very difficult to pass for students that do not keep up with the readings and attend lectures. Students should take detailed notes throughout the semester on their readings and during their lectures. Building a running study guide throughout the semester is also suggested.
Grading Policy

Tests and papers will be graded blind by the instructor and/or teaching assistant. If a student wishes to challenge how his or her exam or paper was graded, the student must submit a written statement describing what part of their assignment was improperly evaluated and why they think that was the case. This must be done within five days of having the assignment returned. Both the instructor and his graduate assistant will re-grade the entire project, compare their assessments, and mutually decide on a final grade. This grade may be higher or lower than the original grade given and will be final. Any clear mistakes or errors made by the instructor will be promptly corrected.

Policy on Academic Honesty

Please familiarize yourself with the undergraduate bulletin’s descriptions of cheating and plagiarism. If you are involved in plagiarism or cheating, the penalty will be failure in the course and you will be reported to judicial affairs. If you are not sure if something violates standards – feel free to ask ahead of time. In general, it’s always better to err on the side of citing too much than too little in your research papers. Information on the university’s policies can be found at: http://www.albany.edu/studentconduct/appendix-c.php.

Accommodations

“Reasonable accommodations will be provided for students with documented physical, sensory, systemic, cognitive, learning and psychiatric disabilities. If you believe you have a disability requiring accommodation in this class, please notify the Director of Disabled Student Services (Campus Center 137, 442-5490). The office will provide the course instructor with verification of your disability, and will recommend appropriate accommodations.” For the University’s policy, see: http://www.albany.edu/disability/resource.shtml. If you wish to discuss academic accommodations for this class please inform the instructor as soon as possible.

Resources

This course will be very reading intensive. The readings come from a mixture of required texts, readings posted on Blackboard, and articles that students will be required to look up themselves using the university’s electronic library resources.

Required Texts


Course Schedule

Introduction

Day 1 - 1/21
- Discuss Syllabus, Course Organization, Grading, and Class Policies

Day 2 - 1/23: Critiquing the WMD Concept

Day 3 - 1/26: A Global Overview of Proliferation

Nuclear Weapons

Day 4 - 1/28: History of Nuclear Weapons Development

Day 5 - 1/30: How Nuclear Weapons Work and the Consequences of Their Use
Day 6 - 2/2: Why States Acquire Nuclear Weapons

Day 7 - 2/4: Explaining Nuclear Restraint

Day 8 - 2/6: Nuclear Opacity and Hedging / Case Studies: Israel and South Africa

Day 9 - 2/9: How to Make Nuclear Weapons

Day 10 - 2/11: Foreign Nuclear Assistance: Sensitive Assistance

Day 11 - 2/13: Foreign Nuclear Assistance: Peaceful Nuclear Assistance
Day 12 - 2/16: Foreign Nuclear Assistance: Peaceful Nuclear Assistance

Day 13 - 2/18: Foreign Nuclear Assistance: Illicit Nuclear Black Markets

Day 14 - 2/20: Nuclear Deterrence

Day 15 - 2/23: Nuclear Compellence / Blackmail


Day 17 - 2/27 - Nuclear Weapons and International Conflict, Pt. II

**Nuclear Nonproliferation Efforts**

Day 19 - 3/4: The Nuclear Nonproliferation Treaty and IAEA

Day 20 - 3/6: Other Nuclear Arms Control Treaties

Day 21 - 3/9: National Export Controls and Multilateral Export Control (10/12)

Day 22 - 3/11: UNSCR 1540 and the Multilateral Export Control Regimes

Day 23 - 3/13: Counter-Proliferation Efforts

Day 24 - 3/16 – No Class
Day 25 - 3/18 – No Class
Day 26 - 3/20 – No Class

**Biological and Chemical Weapons**

Day 27 – 3/23: Biological Weapons

Day 28 - 3/25: Chemical Weapons

Day 29 - 3/27: Chemical and Biological Weapons and the Dual-Use Dilemma

Day 30 - 3/30: Why States Want Chemical and Biological Weapons

Day 31 - 4/1: International Arms Control Efforts
Ballistic Missiles

Day 32 - 4/3: Ballistic Missiles: Strategic Significance and Proliferation Issues

Day 33 - 4/6: No Class

Day 34 - 4/8: Ballistic Missile Proliferation

CBRN Terrorism

Day 35 - 4/10: Nuclear and Radiological Terrorism: Part I

Day 36 - 4/13: Nuclear and Radiological Terrorism: Part II

Day 37 - 4/15: Chemical Terrorism

Day 38 - 4/17: Bioterrorism


Cases Analyses of WMD Security and Proliferation Issues

Day 40 - 4/22: The United States

Day 41 - 4/24: Russia

Day 42 - 4/27: Pakistan

- Victor Asal and Bryan Early. 2012. “Are We Focusing on the Wrong Nuclear Threat?” *Foreign Policy Online*. Access at: [http://www.foreignpolicy.com/articles/2012/05/24/are_we_focusing_on_the_wrong_nuclear_threat](http://www.foreignpolicy.com/articles/2012/05/24/are_we_focusing_on_the_wrong_nuclear_threat)

Day 43 - 4/29: North Korea


Day 44 - 5/1: Iran

- Other Readings TBD

Day 45 - 5/4: China


Day 46 - 5/6: Conclusion