RPOS 399: Weapons of Mass Destruction and International Security

Professor: Nolan Fahrenkopf
Class Times: MWF 12:35-1:30 PM
Room: BB 10
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Office Hours: Uptown, Humanities Building B16 – Monday Wednesday Friday, 10:30 AM - 12:30PM

Course Description

This course explores the broad policy and academic literature related to WMDs. Students will explore the numerous WMD concepts, from nuclear weapons all the way down to modern, and controversial definitions, such as the Boston Bombers. To do this, students will look at both the technical and scientific aspects of WMDs, as well as the policy and academic aspects of their use, construction, and proliferation, by both state AND non-state actors. The course will make use of IR theory, so students should be conversant in the main IR theories. The course will also look at the numerous delivery systems that WMD systems rely on, their proliferation, development, and use outside of the WMD realm. Should the US modernize its nuclear arsenal, is nuclear proliferation a stabilizing force in IR, what issues does Russia’s decaying nuclear infrastructure pose to international security and deterrence, are non-state actors truly a WMD threat? These and other policy and academic questions will be addressed throughout the semester, and students will be expected to be conversant in questions related to WMDs, such as these, by the end.

Expectations

Students are expected to have a working knowledge of the general IR theories and be ready to apply them in both assignments and class discussions. Attendance is mandatory and will be factored into the participation grade. Students are expected to complete all the weekly readings and be able to participate in seminar discussions. Students need to hand in assignments on time, late submissions will suffer from severe late penalties.

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 as well as their associated delivery systems.
- 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
• Understand the issues associated with, and be conversant in the broad trend of conventional and WMD proliferation.

Grading

Participation – 20%
Students participation grade comes from both regular attendance AND regular participation in seminar discussions. Both the quantity AND quality of contributions are considered in the participation grade. The instructor reserves the right to assign pop quizzes which will go into the participation grade.

Getting the Bomb Paper – 20%

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 – 20%

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: 4/4.

Midterm – 15%

In class midterm exam covering the first half of the semester. Format TBD. March 11th

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. 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

“No 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

The readings for this course will be split between book excerpts and other sources, which will be posted on the blackboard and articles that students will be required to look up themselves using the university’s electronic library resources. There are no required text books.

Frank Barnaby “How to Build a Nuclear Bomb” Blackboard

Course Schedule

Introduction

Day 1 - 1/20
- Discuss Syllabus, Course Organization, Grading, and Class Policies

Day 2 - 1/25: Critiquing the WMD Concept
Day 3 - 1/27: A Global Overview of Proliferation

Nuclear Weapons

Day 4 - 1/29: History of Nuclear Weapons Development

Day 5 - 2/1: How Nuclear Weapons Work and the Consequences of Their Use

Day 6 - 2/3: Why States Acquire Nuclear Weapons

Day 7 - 2/5: Explaining Nuclear Restraint

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

Day 9 - 2/10: How to Make Nuclear Weapons

Day 10 - 2/12: Foreign Nuclear Assistance: Sensitive Assistance

Day 11 - 2/15: Foreign Nuclear Assistance: Peaceful Nuclear Assistance
- TBD

Day 12 - 2/17: Foreign Nuclear Assistance: Illicit Nuclear Black Markets

Day 13 - 2/19: Nuclear Deterrence
- Jeffrey Lewis. “Minimum Deterrence.” *Bulletin of the Atomic Scientists* 64(3): 38-41
Day 14 - 2/22: Nuclear Compellence / Blackmail


Day 16: 2/26: Nuclear Weapons and International Conflict, Pt. II


**Nuclear Nonproliferation Efforts**

Day 18 - 3/2: The Nuclear Nonproliferation Treaty and IAEA

Day 19 - 3/4: Other Nuclear Arms Control Treaties (Getting the Bomb Paper due)

Day 20 - 3/7: UNSCR 1540 and the Multilateral Export Control Regimes

Day 21 - 3/9: Counter-Proliferation Efforts

Day 22 - 3/11: Midterm

Day 23 - 3/14 No Class
Day 24 - 3/16 – No Class
Day 25 - 3/18 – No Class

Biological and Chemical Weapons

Day 26 - 3/21 – Biological Weapons

Day 27 – 3/23: Chemical Weapons

Day 28 - 3/28: Chemical and Biological Weapons and the Dual-Use Dilemma

Day 29 - 3/30: Why States Want Chemical and Biological Weapons

Day 30 - 4/1: International Arms Control Efforts

Ballistic Missiles

Day 31 - 4/4: Ballistic Missiles: Strategic Significance and Proliferation Issues (Pick your Poison Paper Due)
Day 32 - 4/6: Ballistic Missile Proliferation

Day 33 - 4/8: TBD

Day 34 - 4/11: TBD

**CBRN Terrorism**

Day 35 - 4/13: Nuclear and Radiological Terrorism: Part I

Day 36 - 4/15: Nuclear and Radiological Terrorism: Part II

Day 37 - 4/18: Chemical Terrorism

Day 38 - 4/20: Bioterrorism
Day 39 - 4/22: No Class

Cases Analyses of WMD Security and Proliferation Issues

Day 40 - 4/25: 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
Day 43 - 4/29: North Korea

Day 44 - 5/1: Iran
- Other Readings TBD

Day 45 - 5/4: China

Day 46 - 5/6: Conclusion