

INTA 8813: Global WMD Policy Syllabus

Fall 2026

Delivery: 100% Web-Based, Asynchronous

Instructor Information

Margaret E. Kosal, PhD., Professor, margaret.kosal@inta.gatech.edu

Office Hours: Weekly office hours via Zoom, TBA in Canvas. Attendance is optional but highly encouraged.

General Course Information

Description

This course will explore the global challenges of weapons of mass destruction (WMD). We will examine the characteristics and address the problems posed by nuclear, chemical, and biological weapons. Topics covered will include history and major theoretical frameworks relating to WMD, such as the development, use, and motivations of major state weapons programs and non-state actors. We will explore efforts to control technology, material, and knowledge – to limit proliferation – via multilateral agreements, initiatives, export control, and national legislation, particularly evaluating the efforts to limit “rogue” state and terrorist acquisition. Strategies and regimes for implementing compliance and verification will be considered, along with their limitations. Counterproliferation strategies to deter, deny, and passively or actively defend against nuclear, biological, and chemical weapons will be studied. Also examined will be proliferation concerns related to emerging technologies, e.g., space weapons, biotechnology, nanotechnology, and synthetic genomics.

Pre- &/or Co-Requisites

- None

Course Goals and Learning Outcomes

By the end of the course, students will be able to:

1. recognize causal and determinant relationships among policy, security, and science and technology (S&T) across different topic areas.
2. explain the history of WMD programs, current global WMD issues, and pressing challenges for the future in an international security context.
3. demonstrate the ability to apply concepts and multiple methodologies to explain phenomena in WMD policy.
4. assess the relationships between organizational institutions, governance entities & structures (e.g., international agreements and institutions), and WMD, including organizations with S&T missions.
5. use their knowledge of international affairs in a practical problem-solving way to address issues of immediate international concern.

Course Materials

Course Text

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Below are the required textbooks for this course. You can access *Deadly Arsenals* and other readings from the Reading List in Canvas **except** for *Toxic Terror*. **You are required to purchase the *Toxic Terror* textbook.**

- 1) Joseph Cirincione, Jon Wolfsthal, Miriam Rajkumar, *Deadly Arsenals: Nuclear, Biological, and Chemical Threats*, Second Edition Revised and Expanded, 2005
- 2) Jonathan Tucker (editor), [*Toxic Terror: Assessing Terrorist Use of Chemical and Biological Weapons*](#), MIT Press, 2000

Required Web Subscription:

- *Proliferation News*: A twice-weekly email of aggregated news on nuclear nonproliferation from the Carnegie Endowment for International Peace, <https://carnegieendowment.org/programs/nuclear-policy/proliferation-news>

//or//

- *Nuclear Policy News*: A daily email of news clips from around the world on nuclear issues from the Center for Strategic and International Studies Project on Nuclear Issues, <https://www.csis.org/subscribe> and click on the box for Nuclear Policy News

//and//

- *The Pandora Report*: a weekly update on biodefense and chemical defense-related stories compiled by George Mason University, <https://pandorareport.org/category/pandora-report/>

Course Requirements, Assignments & Grading

Assignment Distribution and Grading Scale

Assignment	Weight (Percentage, points, etc.)
Analytical Essay 1	25%
Analytical Essay 2	25%
Analytical Essay 3	25%
Analytical Essay 4	25%

Grading Scale

Your final grade will be assigned as a letter grade according to the following scale:

- A 90-100%
- B 80-89%
- C 70-79%
- D 60-69%

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F 0-59%

Description of Graded Components

Grades are based on four sets of analytical questions. The questions require you to explore and demonstrate analysis of critical aspects of weapons of mass destruction (WMD) strategies, drawing from key policy documents, assigned readings, recorded lectures, and historical events. Your task is to answer each question ensuring that you use specific evidence or examples to support your answers. You will have 1 week from the time the questions are released to submit them. There is no final exam.

Extra Credit Opportunities

Choose up to 2 from *different* categories:

- Book review, fiction or non-fiction, relevant to the course topic. Minimum 750 words. No more than 1200 words.
- Synopsis and analysis of television series, film, narrative-driven video/computer game, or other non-print media relevant to the course topic. Critique perception and portrayal of WMD policy issues. Minimum 750 words. No more than 1200 words.
- Summary and commentary on university or professional seminar or other colloquia/event/guest lecture related to WMD policy. Minimum 750 words. No more than 1200 words.
- Outside interview (University faculty and staff exempt) with someone involved WMD policy. One of the best ways to build connections is to appeal to someone's ego by being genuinely interested in their work. Ask meaningful questions. Minimum 750 words. No more than 1200 words.

Each extra credit submission is worth up to 5% of the grade. Two submissions maximum.

Submitting Assignments

All assignments must be completed and submitted within the Canvas. Sending assignments, whether early, on time, or late to the professors is not permitted and will not be accepted. If there are technical issues, please notify the help desk, as well as the professor immediately.

Assignment Due Dates

All assignments will be due at the times listed in the course schedule at the end of the syllabus. These times are subject to change so please check back often. Please convert from Eastern Time to your local time zone using a [Time Zone Converter](#).

Late and Make-up Work Policy

You are expected to make reasonable efforts to complete and submit assignments on time. I recognize that both anticipated and unanticipated events may occur that may cause conflicts, especially for those with busy professional lives. If it is a known or pre-existing conflict, please contact me ahead of time. If it is unanticipated, please contact me ASAP. If an assignment due date falls on a religious holiday, an automatic 24-hour extension will be granted. Communication is in your best interest.

Unless a late submission request is granted, late submission of an assignment within 48 hours of it being due will result in an automatic 10% grade penalty. Late submission of an assignment between 48 and 72 hours after it is due will result in an automatic 25% grade penalty.

Grading and Feedback

Except in exceptional situations, grades for assignments will be posted within one week of the submission date.

Technology Requirements and Skills

Computer Hardware and Software

- High-speed Internet connection
- Laptop or desktop computer with a **minimum** of a 2 GHz processor and 2 GB of RAM
- Windows for PC computers OR Mac iOS for Apple computers.
- Complete Microsoft Office Suite or comparable and the ability to use Adobe PDF software (install, download, open, and convert)
- Latest versions of Mozilla Firefox, Chrome and/or Safari browsers

Onboarding Quiz and Proctoring Information

All Georgia Tech online degree and certificate students are required to complete the Onboarding Quiz with Honorlock in the first week of the course. Honorlock is utilized for student identity verification and to ensure academic integrity. Honorlock provides student identity verification via facial and ID photos. You may also be asked to scan the room around you. The Onboarding Quiz is needed to help make sure that your identity is verified and that your system is set up to work with Honorlock online proctoring tool. You are required to complete this quiz early in the semester to avoid problems when taking proctored exams.

Technology Help Guidelines

30-Minute Rule: When you encounter struggles with technology, give yourself 30 minutes to 'figure it out.' If you cannot, then post a message to the discussion board; your peers may have suggestions to assist you. You are also directed to contact the Helpdesk 24/7.

When posting or sending an email requesting help with technology issues, whether to the Helpdesk, message board, or me use the following guidelines:

- Include a descriptive title for the subject field that includes 1) the name of course 2) the issue. Do NOT just simply type "Help" into the subject field or leave it blank.
- List the steps or describe the circumstance that preceded the technical issue or error. Include the exact wording of the error message.
- When possible, always include a screenshot(s) demonstrating the technical issue or error message.
- Also include what you have already tried to remedy the issue (rebooting, trying a different browser, etc.).

Course Policies, Expectations & Guidelines

Communication Policy

- Email course questions and personal concerns, including grading questions, to me privately at margaret.kosal@inta.gatech.edu. Please do NOT submit posts of a personal nature to the discussion board unless it is a private post on **Ed Discussion**.
- Email will be checked at least twice per day Monday through Friday; Saturday and Sunday, email is checked once per day. During the week, I will respond to all emails within 24 hours; on weekends and holidays, allow up to 48 hours. If I don't respond within 24 hours, please

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resend the email, i.e., just forward it to me. (I won't mind.) If there are special circumstances, e.g., overseas travel, that may delay my response, I will make an announcement to the class.

- Student Forum/Q&A discussion boards will be checked once per day Monday through Sunday.
- Virtual office hours will be held using **Zoom**. I will hold Virtual Office Hours every week at a time to be announced in Canvas. I am also happy to schedule one-on-one office hours in person, via margaret.kosal@inta.gatech.edu.
- For questions related to technology, the Digital Learning Support team at <https://b.gatech.edu/digitallearningsupport> for assistance. You can also reach the Canvas Hotline by phone at 1(877) 259-8498 or by email at support@instructure.com.

Online Student Conduct and (N)etiquette

Although it is not expected to be a problem in a graduate-level class, students are asked to behave in the discussions and other class interactions professionally and civilly. If you are in doubt, do not post it! Instructors reserve the right to remove any postings deemed inappropriate, unprofessional, or otherwise distracting from the course.

Do not post controlled unclassified information (CUI), classified information, or other national security-sensitive information. Do not post links to WikiLeaks or similar mirror sites.

University Use of Electronic Email

A university-assigned student e-mail account is the official university means of communication with all students at Georgia Institute of Technology. Students are responsible for all information sent to them via their university-assigned e-mail account. If a student chooses to forward information to their university e-mail account, he or she is responsible for all information, including attachments, sent to any other e-mail account. To stay current with university information, students are expected to check their official university e-mail account and other electronic communications on a frequent and consistent basis. Recognizing that some communications may be time-critical, the university recommends that electronic communications be checked minimally twice a week.

Plagiarism & Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. All students enrolled at Georgia Tech, and all its campuses, are to perform their academic work according to standards set by faculty members, departments, schools, and colleges of the university; and cheating and plagiarism constitute fraudulent misrepresentation for which no credit can be given and for which appropriate sanctions are warranted and will be applied

While academic integrity takes many forms, one of the most common violations is plagiarism. Per the Georgia Tech Honor Code, plagiarism is an act of academic misconduct. The Georgia Tech Honor Code specifies: "Plagiarism' is the act of appropriating the literary composition of another, or parts of passages of his or her writings, or language or ideas of the same, and passing them off as the product of one's own mind. It involves the deliberate use of any outside source without proper acknowledgment."

Plagiarism ranges from the blatant, such as purchasing a term paper or copying on an exam, to the subtle, e.g., failing to credit another author with the flow of ideas in an argument. Simply changing a few words from the writings of other authors does not alter the fact that you are

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essentially quoting from them and appropriating their ideas. Paraphrasing of this sort, where you use the words of another almost verbatim without acknowledging your source, is the most common form of plagiarism among students and in general. When you state another author's viewpoint, theory, or hypothesis – especially when it is original or not generally accepted – you must also include a reference to the originator. In general citations are unnecessary when the information is considered common knowledge or a matter of widespread agreement or controversy.

For more information on the Georgia Tech Honor Code, please see <https://policylibrary.gatech.edu/student-life/academic-honor-code>

*In short: just don't cheat.
This is one instance when asking forgiveness
rather than permission is *not* a good strategy.*

Collaboration & Group Work

If you want to work together on assignments, that is encouraged. Group size should not exceed 4 students. Ensure that when you submit your assignments, that they are a group submission is clearly indicated and the names of all members of the group are clearly included on the document.

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services at (404)894-2563 or <http://disabilityservices.gatech.edu/>, as soon as possible, to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible to set up a time to discuss your learning needs.

Copyright

Among the materials that may be protected by copyright law are the lectures, notes, and other material presented in class or as part of the course. Always assume the materials presented by an instructor are protected by copyright unless the instructor has stated otherwise.

Student-Faculty Expectations Agreement

At Georgia Tech we believe that it is important to strive for an atmosphere of mutual respect, acknowledgment, and responsibility between faculty members and the student body. See <https://catalog.gatech.edu/rules/21/> for an articulation of some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.