Course Syllabus

Course Description
Provides an overview of a broad range of topics concerning the use of weapons of mass destruction (WMD), including nuclear, chemical, and biological weapons, development, and terrorist use. The course context is structured to discuss the threat of WMD due to terrorism and rogue states’ development of WMD. The goal of the course is to inform the background history and technical concerns as well as how to deal with these concerns in the future.

Course Textbook(s)

Course Learning Outcomes
Upon completion of this course, students should be able to:

1. Articulate the developmental history of weapons of mass destruction (WMD) technology in World War I and World War II.
2. Summarize the development, scope, and principles of international law regulating WMD proliferation.
3. Explain the technology, types, effects, fabrication, development, and use of nuclear, biological, chemical, and agricultural weapons.
4. Assess how terrorism, genetic engineering, biological warfare, and cyberterrorism may affect future prospects.
5. Analyze terrorist threats, suspects, and counterterrorism operations concerning WMD, and compare and contrast past events.
6. Evaluate the moral and ethical implications of using WMD.
7. Articulate how the use of WMD would impact political, diplomatic, environmental, and societal concerns.
8. Assess the capabilities of WMD to determine counteraction strategies.
9. Explain the use of personal protective equipment (PPE) in emergency response, decontamination, and remediation strategies.

Prerequisite(s)
HLS 2301 - Introduction to Terrorism or equivalent

Credits
Upon completion of this course, the students will earn 3 hours of college credit.

Course Structure
1. **Study Guide:** Course units contain a Study Guide that provide students with the learning outcomes, unit lesson, required reading assignments, and supplemental resources.
2. **Learning Outcomes:** Each unit contains Learning Outcomes that specify the measurable skills and knowledge students should gain upon completion of the unit.
3. **Unit Lesson:** Unit Lessons, which are located in the Study Guide, discuss lesson material.
4. **Reading Assignments:** Units contain Reading Assignments from one or more chapters from the textbook and/or outside resources.
5. **Suggested Reading:** Suggested Readings are listed within the Study Guide. Students are encouraged to read the resources listed if the opportunity arises, but they will not be tested on their knowledge of the Suggested Readings.
6. **Learning Activities (Non-Graded):** Non-graded Learning Activities are provided to aid students in their course of study.

7. **Unit Assessments:** This course contains Unit Assessments, which test student knowledge on important aspects of the course. These tests may come in many different forms, ranging from multiple choice to written response questions.

8. **Unit Assignments:** Students are required to submit for grading Unit Assignments. Specific information and instructions regarding these assignments are provided below. Grading rubrics are included with each assignment. Specific information about accessing these rubrics is provided below.

9. **Final Exam:** Students are to complete a Final Exam in Unit VIII. All Final Exams are proctored - see below for additional information. You are permitted four (4) hours to complete this exam in the presence of your approved proctor. This is an open-book exam. Only course textbooks and a calculator, if necessary, are allowed when taking proctored exams.

10. **Ask the Professor:** This communication forum provides you with an opportunity to ask your professor general or course content related questions.

11. **Student Break Room:** This communication forum allows for casual conversation with your classmates.

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**CSU Online Library**

The CSU Online Library is available to support your courses and programs. The online library includes databases, journals, e-books, and research guides. These resources are always accessible and can be reached through the library web page. To access the library, log into the myCSU Student Portal, and click on "CSU Online Library." You can also access the CSU Online Library from the "My Library" button on the course menu for each course in Blackboard.

The CSU Online Library offers several reference services. E-mail (library@columbiasouthern.edu) and telephone (1.877.268.8046) assistance is available Monday – Thursday from 8 a.m. to 5 p.m. and Friday from 8 a.m. to 3 p.m. The library’s chat reference service, Ask a Librarian, is available 24/7; look for the chat box on the online library page.

Librarians can help you develop your research plan or assist you in finding relevant, appropriate, and timely information. Reference requests can include customized keyword search strategies, links to articles, database help, and other services.

**LibGuides**

Think of a LibGuide (a Library Guide) as a mini-website to help you with your assignments. It has relevant information such as databases, e-books, and websites specific to your courses. If you have any questions, please reach out to your friendly library staff.

Click [here](#) for the LibGuide for this course.

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**Unit Assignments**

**Unit I Article Review**

During World War I, nearly 40% of all casualties were caused by machine-gun fire. Some historians describe the effect of the machine gun as a weapon of mass destruction (WMD). Paul Farhi (2003), in "The Soothing Sound of Fighting Words" in The Washington Post, cited a quote by historian Paul Fussell on the subject: “A machine gun, properly fired, is a weapon of mass destruction. We’re pretending that only awful and sinister people own weapons of mass destruction. We own them, too. We just call them something else” (para. 18).

However, history has proven that a weapon in the hands of a well-trained sniper can cause numerous deaths and casualties. Fully automatic firearms or semiautomatic firearms can indeed inflict mass destruction, but are not classified by the FBI as WMD. Numerous forms of WMD were used throughout WWII even though no country resorted to chemical warfare, short of tear gas. Such WMD ranged from grenades, mines, artillery, and bombs to the attacks against Hiroshima and Nagasaki.

Access the CSU Online Library or an outside source, and locate a scholarly journal article on the use of WMD during World War II. Using APA format, write a two-page paper summarizing the use, implications, and repercussions (i.e., side effects, sociological effects, or political effects) of the WMD. Within your paper, you must address if any of the uses of WMD may be considered acts of terrorism. (Remember that terrorism is an act against any nonmilitary target that is meant to evoke political change.)

Additionally, you must address what actions could have been taken by either side in WWII to develop counteraction strategies that would have prevented the attack or would have minimized the impact of the attack. In your conclusion, please provide a summary of your findings, and include an analysis of the impact of the specific WMD introduced in your paper along with how that WMD contrasts to probable future terrorist attacks.

Information about accessing the grading rubric for this assignment is provided below.

**Unit II Research Paper Topic**

The purpose of this assignment is to help you decide which scenario you want to address and to help you prepare for your...
Unit VII Research Paper. Choose one of the three scenarios (see scenario list below) for your research, which must relate to how terrorism, genetic engineering, genocide operations, biological warfare, or cyberterrorism may affect our efforts to mitigate future attacks globally or internationally, as well as the moral and ethical implications of the use of such WMD in a terrorist attack of this magnitude. Additionally, the paper must address the capabilities and design of future attacks and the strategies we must develop to prevent or diminish the impact of such attacks. You are encouraged to truly think outside of the box to predict potential terrorist strategies that are new in nature, rather than just repeating previous efforts from terrorist organizations.

From the retrospect of intelligence officers with the Central Region Command in Afghanistan, you can be assured that, in addition to infrastructure attacks, terrorist organizations focus their attacks against educational and religious systems that they deem evil from their perspective.

Scenario 1:
The election year is heating up with every new debate. You are the police chief of Atlanta. A debate has been scheduled in the Atlanta Chastain Park, which is the largest city park in Atlanta and consists of 268 acres of open terrain. The park is located near the northern edge of the city. The debate will be held at the Chastain Park Amphitheater, which is designed to hold just under 7,000 people, not including the politicians and their personnel. You can search the Google Maps (https://www.google.com/maps) website for a map location of Chastain Park.

Your research must identify what federal and state agencies will be assisting you with the security for the event. You have been assigned the duty to provide a risk analysis of the physical facilities and to provide your opinion of the probability of terrorist attacks against the politicians, the 7,000 participants within the amphitheater, and the untold numbers that will be in the park surrounding the theater. You must ensure the safety of everyone attending the debate and those visiting the park. Your mitigation plan must address ingress and egress to and from the park and the amphitheater before, during, and after the event. Additionally, you must identify possible existing threats as well as the terrorist groups responsible for those threats. You must identify any and all probable avenues of attack and develop a plan to prevent such attacks. Keep in mind, you must prepare for the worst-case scenario, which can consist of any form of an attack, including an attack from the ground or air, long-distance attacks, or preplanted improvised explosive devices (IEDs). Consider that thousands of people may die or be seriously injured if your plan fails to recognize all relevant scenarios or threats.

Scenario 2:
You are the head of a Department of Homeland Security investigative task force assigned to mitigate threats or possible terrorist attacks against the port area of San Diego. This includes numerous U.S. naval vessels, untold numbers of oceanic freighters, local fishing vessels, and countless pleasure yachts. You have received a threat from an unknown source stating that coordinated attacks are going to be launched against military and civilian targets in and around the San Diego area. The threat alludes to the use of nuclear missiles launched from vessels off the coast of San Diego. The source of the threats remains unknown, but intelligence (INTEL) points toward North Korea and Iran.

Your job is to identify the probable source of the threats and to mitigate the numerous scenarios of attack that could stem from the Pacific Ocean, the Baja Peninsula, the roadways entering San Diego from all directions, or from within San Diego. No specific terrorist group has given any notice of an attack.

You must identify all probable sources from which a nuclear missile could be launched. Since INTEL advises that North Korea nor Iran have long-range capability, your search must relate to the immediate area. Additionally, all you know is that the attack is scheduled to occur sometime this month.

Identify all possible sources that could launch a nuclear missile, and determine countermeasures that will empower your personnel to defeat the attack or attacks before they occur.

Your plan must include a worst-case-scenario response plan to enable you to properly respond and deal with the blast effects from the attack should your personnel fail to stop the attack(s).

Scenario 3:
You are a senior officer in the U.S. Border Patrol, and your INTEL group has received a warning that a terrorist cell is planning to launch a biological aerial attack across the southern borders of the United States, but the information you received does not identify a specific border-area crossing point. Therefore, you must mitigate a plan to identify all probable entry points along the massive stretch of land that borders along Mexico and the United States. Additionally, you have to mitigate how the attacks will occur. Numerous scenarios can be identified, which include by air, land, or by preplanted IEDs, as well by other methods designed to release the biological hazard into the air or the local water supply systems.

Your job is to identify all of these possible situations and to provide a plan that will efficiently inspect and monitor each threatened area and possible sources of attack. Can you simply shut down all small plane traffic in the area? Could the biological hazard already be in place? Could the biological hazard be transported across the border through tunnels? What cities are probable targets for such attacks? What plans can you develop to ensure protection for all of these cities? How far north can such attacks penetrate?

Your plan must include identification of all possible scenarios, and you must include a response plan based on the worst-case scenario, which provides proper response to the area or areas suffering from the attack and how you plan to protect first responders and healthcare facilities during and after the attack.

Also for this assignment, you must include three sources that will be used for researching the Unit VII Research Paper. You are required to submit the scenario topic for the VII Research Paper for approval. Provide a description of your topic and the focus of your paper in at least 150 words, and provide a list of references you intend to use in your research. This may be subject to change since your topic and references will need approval by your instructor. Please contact your instructor if you have any questions or concerns.
Unit III Case Study

Impact of TIC/TIM

Many forms of toxic industrial chemicals (TICs) have been used during combat operations in wars throughout the world. One of the more memorable uses of a TIC is the use of Agent Orange (a defoliant including dioxin as well as numerous other chemicals) during the Vietnam War with an impact that spans across the past 50 years. The U.S. government and manufacturers of the deadly chemical allegedly sprayed and otherwise dispersed from planes and helicopters indiscriminately for the express purpose of destroying the jungle vegetation that served as a perfect camouflage for the North Vietnamese and Vietcong troops opposing the U.S. military. Mosbergen, in her 2013 article “Agent Orange Victims Captured in Heartbreaking Portrait Series Decades After Vietnam War” from The Huffington Post, suggests that one could easily reason that any chemical that could completely defoliate a 40-foot-tall and extremely thick jungle canopy could equally destroy any other lifeform as well. The Veterans Administration, the federal government, and manufacturers have continued to deny responsibility for the health issues left in the wake of this deadly chemical with the Vietnamese people and Vietnam combat veterans still suffering today.

Please research Agent Orange, and determine if the chemical has been responsible for the death and health issues of millions of people during and since the Vietnam War. Was the chemical indiscriminately dispersed, knowing that immediate and long-term effects would impact any human and animal life coming in contact with the chemical? What effort has the United States government provided to compensate and care for those whose lives have been destroyed by this chemical? Are such chemicals still used in military operations? What should be done for the millions of families across the globe who suffer from the debilitating effects of this chemical?

Please rely on the CSU Online Library for access to articles concerning this issue. If the appropriate source is not available through CSU, please refer to another reliable source; please remember that Wikipedia.org and other similar sources are not accepted by CSU.

Write a minimum three-page, double-spaced paper summarizing the effects of the use of Agent Orange, not only on the victims, but also on the families and in communities where each victim lives.

In addition to the topics above, your paper should also discuss the following:

- signs and symptoms,
- incubation time,
- mode of exposure (e.g., injection, inhalation, cutaneous),
- prevention,
- treatment,
- locality impacts (e.g., weather, location, population),
- sociological impacts, and
- counteraction strategies.

Your paper must fully comply with APA requirements, which means that the paper must include a title page, running head, headings, in-text citations for all direct quotes and paraphrased information, and a reference page. The title and reference pages do not count toward the total page requirement.

Information about accessing the grading rubric for this assignment is provided below.

Unit VII Research Paper

The purpose of this assignment is to provide you with the opportunity to apply the knowledge you have gained toward mitigating the probability of a terrorist attack based on the information provided in the scenario list provided in Unit II. You will assume the position that you are an officer in charge of providing security in the scenario you have chosen. You will analyze the physical location of the scenario, mitigate probable areas of concern, and identify probable targets that may require special attention. It is up to you and your personnel to ensure that terrorists will have no opportunity to disrupt the event or unleash any form of attack. The lives of the participants in the event depend on your ability to predict every given situation and provide security to prevent such attacks. Please identify all weak areas, and provide your analysis of how to protect property and personnel during the event as well as before and after the event. The paper must address the following areas of concern:

How does the terrorist act in your paper impact future prospects of terrorism whether by genetic engineering, cyberterrorism, biological warfare, or any other weapons of mass destruction (WMD)?

Evaluate the moral and ethical implications of the use of this type of WMD destruction.

Assess the capabilities of the WMD portrayed in your scenario, and mitigate counteraction strategies.

Please use the scenario you chose in the Unit II assignment that was approved by the instructor. Complete a research paper that must be a minimum of five pages in length, not including the title page and the reference page. The research paper must follow APA guidelines and contain the following components:

- Title page: The title page must be in APA format, which includes the APA running head and the page number in the header.
- Abstract: Provide a brief explanation of the purpose of your paper. This must be a minimum of 150 words. This should be similar to the topic description you submitted in the Unit II assignment.
- Introduction: Provide a brief review of the scenario you have chosen that was submitted and approved by the instructor in...
Intermediate headings: Intermediate headings help the reader transition from one subject to the next. This is the focus of your research and analysis on the scenario you have chosen, where you identify the risks and mitigate solutions that will provide the appropriate protection as well as provide reactive measures in case terrorists manage to complete an attack regardless of your preventive measures. The content must center on the three areas of concern identified above.

Conclusion: Provide a summary of your findings and solutions based on best practices.

Reference page: You must include the heading (References) centered above the reference list on a separate last page. You must include the three references selected in the Unit II assignment. All references must be in APA format, and each reference must relate to at least one in-text citation.

APA Guidelines

The application of the APA writing style shall be practical, functional, and appropriate to each academic level, with the primary purpose being the documentation (citation) of sources. CSU requires that students use APA style for certain papers and projects. Students should always carefully read and follow assignment directions and review the associated grading rubric when available. Students can find The CSU Citation Guide by clicking here. This document includes examples and sample papers and provides information on how to contact the CSU Writing Center.

Grading Rubrics

This course utilizes analytic grading rubrics as tools for your professor in assigning grades for all learning activities. Each rubric serves as a guide that communicates the expectations of the learning activity and describes the criteria for each level of achievement. In addition, a rubric is a reference tool that lists evaluation criteria and can help you organize your efforts to meet the requirements of that learning activity. It is imperative for you to familiarize yourself with these rubrics because these are the primary tools your professor uses for assessing learning activities.

Rubric categories include (1) Journal, (2) Assessment (Written Response), and (3) Assignment. However, it is possible that not all of the listed rubric types will be used in a single course (e.g., some courses may not have Assessments).

The Journal rubric can be found within Unit I’s Journal submission instructions.

The Assessment (Written Response) rubric can be found embedded in a link within the directions for each Unit Assessment. However, these rubrics will only be used when written-response questions appear within the Assessment.

Each Assignment type (e.g., article critique, case study, research paper) will have its own rubric. The Assignment rubrics are built into Blackboard, allowing students to review them prior to beginning the Assignment and again once the Assignment has been scored. This rubric can be accessed via the Assignment link located within the unit where it is to be submitted. Students may also access the rubric through the course menu by selecting “Tools” and then “My Grades.”

Again, it is vitally important for you to become familiar with these rubrics because their application to your Journals, Assessments, and Assignments is the method by which your instructor assigns all grades.

Final Examination Guidelines

Final Exams are to be administered to students by an approved Proctor. CSU approves two flexible proctoring options: a standard Proctor, who is chosen by the student and approved by the university, or Remote Proctor Now (RP Now), an on-demand, third-party testing service that proctors examinations for a small fee.

Students choosing RP Now must have an operational webcam/video with audio, a high-speed Internet connection, and the appropriate system rights required to download and install software.

To review the complete Examination Proctor Policy, including a list of acceptable Proctors, Proctor responsibilities, Proctor approval procedures, and the Proctor Agreement Form, go to the myCSU Student Portal from the link below.

http://mycsu.columbiasouthern.edu

You are permitted four (4) hours to complete this exam in the presence of your approved Proctor. This is an open book exam. Only course textbooks, writing utensils, and a calculator, if necessary, are allowed when taking proctored exams.

You may use only your textbook as source material for your response. All source material must be referenced (paraphrased and quoted material must have accompanying citations). You may use the Publication Manual of the American Psychological Association (APA Style Guide) or the CSU Citation Guide for reference.

Communication Forums

These are non-graded discussion forums that allow you to communicate with your professor and other students.
Participation in these discussion forums is encouraged but not required. You can access these forums with the buttons in the Course Menu. Instructions for subscribing/unsubscribing to these forums are provided below.

Once you have completed Unit VIII, you MUST unsubscribe from the forum; otherwise, you will continue to receive e-mail updates from the forum. You will not be able to unsubscribe after your course end date.

Click here for instructions on how to subscribe/unsubscribe and post to the Communication Forums.

Ask the Professor

This communication forum provides you with an opportunity to ask your professor general or course content questions. Questions may focus on Blackboard locations of online course components, textbook or course content elaboration, additional guidance on assessment requirements, or general advice from other students.

Questions that are specific in nature, such as inquiries regarding assessment/assignment grades or personal accommodation requests, are NOT to be posted on this forum. If you have questions, comments, or concerns of a non-public nature, please feel free to e-mail your professor. Responses to your post will be addressed or e-mailed by the professor within 48 hours.

Before posting, please ensure that you have read all relevant course documentation, including the syllabus, assessment/assignment instructions, faculty feedback, and other important information.

Student Break Room

This communication forum allows for casual conversation with your classmates. Communication on this forum should always maintain a standard of appropriateness and respect for your fellow classmates. This forum should NOT be used to share assessment answers.

Schedule/Grading

The following pages contain a printable Course Schedule to assist you through this course. By following this schedule, you will be assured that you will complete the course within the time allotted.

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HLS 3301, Weapons of Mass Destruction
### Unit V: Nuclear and Radiological Hazards

**Read/View:**
- Unit V Study Guide
- Chapter 5: Nuclear and Radiological Hazards, pp. 163-223

**Submit:**
- Unit V Assessment

**Weight:** 6%

### Unit VI: Explosive Hazards

**Read/View:**
- Unit VI Study Guide
- Chapter 6: Explosive Hazards, pp. 229-281

**Submit:**
- Unit VI Assessment

**Weight:** 6%

### Unit VII: WMD Relating to Terrorism Today

**Read/View:**
- Unit VII Study Guide
- Reading Assignment (1 article): See Study Guide

**Submit:**
- Unit VII Research Paper
- Request to take Final Exam

**Weight:** 14%

### Unit VIII: PPE, Decontamination, and Remediation

**Read/View:**
- Unit VIII Study Guide
- Chapter 9: Personal Protective Equipment for Emergency Response, Decontamination, and Remediation

**Submit:**
- Unit VIII Assessment
- Final Exam

**Weight:** 16%