

**WILMINGTON UNIVERSITY**  
**COURSE SYLLABUS**

**FACULTY MEMBER:**

**TERM:**

**COURSE TITLE: Fundamentals of Bioterrorism**

**COURSE NUMBER: MHS 7008**

**TEXTBOOK TITLES: Biosecurity and Bioterrorism: Containing and Preventing Biological Threats, 2<sup>nd</sup> ed.; Weapons of Mass Destruction and Terrorism, 2<sup>nd</sup> ed.**

**OFFICE HOURS/METHOD OF CONTACT:**

**Technical Requirements that may be required to utilize technology in this course:**

- A headset or microphone.
- Webcam

**COURSE DESCRIPTION:**

This course will explore biological weapons and agents, their methods of dissemination and exposure, as well as effects and treatments. Bioterrorism will be examined from an international and domestic perspective by identifying impending threats to the U.S. as well as countries or terrorist groups with the existing capability or possibility for the development of bioagents and attacks. Federal and local preparedness will be addressed with an emphasis on identification of potential threats and expedient, efficient responses. Bio-attacks and war games will be explored with a focus on potential casualties and socioeconomic impact.

**COURSE OBJECTIVES:**

**GOAL A:** Students will demonstrate an understanding of the historical perspective of terrorism, which aids with understanding of evolutionary paths and developments over time, as well as the role of bioterrorism and other WMD terrorism. Students will demonstrate basic understanding of the bioterror threats.

**Learning Outcomes:** The student will:

- A-1. Compare and evaluate the differing definitions of terrorism
- A-2. Define and classify *bioterrorism*
- A-3.



- D-1. Review federal level programs and responses to biological threats and events
- D-2. Describe challenges to preparedness, management, mitigation of biological events.
- D-3. Summarize state and local response efforts and assets
- D-4. Identify the importance and critical elements of scene/situational awareness
- D-5. Describe decontamination procedures for biological agents; distinguish from chemical decontamination
- D-6. Explain and evaluate *surge capacities*

**GOAL E:** Students will acquire an understanding of tracking biological agents from a standpoint of biosecurity and explore current programs and assets thereof.

**Learning Outcomes:** The student will:

- E-1. Determine critical legal aspects of biosecurity
- E-2. Break down existing biosecurity programs and assets
- E-3. Diagram the utility of *microbial forensics* toward tracking an attack
- E-4. Assess *threat convergence* toward WMD

**GOAL F:**

Students will acquire the ability to judge biosecurity strategies for prevention, preparedness and mitigation with regard to bioterrorism.

**Learning Outcomes:** The student will:

- F-1. Judge biosecurity the dark specter of terrorism
- F-2. Construct biosecurity strategies for prevention, preparedness, and containment

**GOAL G:** Students will acquire an understanding of TJ ention, preparedne Q q 0.0000

1. Discussion Board Participation:	20
2. Reading Content Quizzes	10
3. Current Event Discussions	10
4. Essays	15
5. Presentation	15
6. Research Paper	30
<b>TOTAL:</b>	<b>100</b>

**Course requirements:** Access to the internet is imperative as well as good computer skills and knowledge of Microsoft Office.

### **STRUCTURED ASSIGNMENTS:**

**All assignments are worth 100 points.**

#### Assignment Type #1: Discussion Board Questions

Each week students will post an initial response to the Discussion Board that answers the assigned question using a combination of reading references, current events, and personal knowledge and practical application/understanding from life/career experiences. This initial post should occur by Wednesday night (**midnight EST**) of the week. Students will then have to submit *at least TWO QUALITY RESPONSES* to the discussions of other students or the instructor by Sunday at 11:59 **EST** of that week. Students are not restricted to the response perform, but the minimum requirement to be considered for full credit is **Points: 20% of final grade**

#### Assignment Type #2: Content Quiz

Content Quiz material will come from the weekly readings or other course materials as specified each week. Students are expected to have read the course material, but may use the texts and other resources during the quizzes. Each quiz may be taken over time and resubmitted a second time if desired. **Points: 10% of final grade**

#### Assignment Type #3: Current Event Discussion Forums

During **weeks 1, 3, & 6** students are to research a current news article, analysis piece and write a one paragraph summary and one paragraph assessment (analysis) geared toward colleagues based on specific instructions issued per given week. **Points: 10% of final grade**

This paper is engaging students in a synthesis of newly gained knowledge of biological and chemical weapons and warfare, and their indicators, toward advising emergency planning for a school or campus. Proper response and mitigation efforts should also be incorporated.

**Points: 15% of final grade (along with critical infrastructure essay)**

Assignment Type #6: Kaltura Presentation

This presentation offers an opportunity for students to employ learning techniques by choosing and researching a specific terror group and biological agent toward a fictitious threat, for which they will sharpen presentation techniques in offering a briefing of the threat to an agency head. The Kaltura presentation should be 8-12 slides in length with an appropriate run time. **Points: 15 % of final grade**

Assignment Type #6: Final Research Paper

This research paper will assess your understanding of key elements of the learning objectives for the course. Material should be culled from all reading and supplemental materials from the course, as well as independent research. Using a known WMD plot that did not carry through, students will apply knowledge of CBRN weapons, impacts, and response capabilities to predict how such a plot would play out in the current landscape of the homeland. **Points: 30 % of final grade**

## VI. COURSE OUTLINE AND ACTIVITIES:

Week #1	Post introductions on the Group Discussion Board Assigned Reading Discussion Forum Content Quiz Current Events
Week#2	Assigned Reading Discussion Forum <i>Critical Infrastructure essay due at the end of the week</i>
Week #3	Assigned Reading Discussion Forum Content Quiz Current Events
Week #4	Assigned Reading Discussion Forum <i>Reflection Paper due at the end of the week</i>
Week #5	Assigned Reading Discussion Forum <i>Kaltura Presentation due at the end of the week</i>

Week #6      Assigned Reading  
                 Discussion Forum  
                 Content Quiz  
                 Current Events

Week #7      Assigned Reading  
                 Discussion Forum  
                 *NOTE: No Current Event Forum or Content Quiz this week!*  
                 *Final Research Paper due*

Each week, students are expected to log on to Canvas and post at least three posts to the Group *Question*. For example, one initial post answering the question *The initial post, answering the assigned question should be submitted by the fourth day of each week (in order to facilitate class discussion), while the last reply to peers should be submitted no later than the last day of course work each week.*

**RESOURCES:**

Textbooks, search of selected web pages and Internet Sites and other materials are included in the readings and resources folders each week.