

BOR 3322: Weapons of Mass Destruction

Office Hours: email, text and phone, no set hours.

Course Description/Overview

This course for non-scientists is a study of chemical, biological and radiological science involved in the different forms of weapons of mass destruction. Identification of critical infrastructure and the associated threats are analyzed. The course covers topics of basic science, treatment, and short- and long-term effects, among other issues central to understanding hostile WMD agents.

Course Bibliography and Required Readings

Two books needed:

Biological and Chemical Terrorism: A Guide for Healthcare Providers and First Responders 1st Edition ISBN-13: 978-1588901866 (Kindle ~\$16 or buy used ~\$13 by Weinstein)

Terrorism and WMDs: Awareness and Response, Second Edition 2nd Edition, by John Pichtel (Author) ISBN-13: 978-1498738989 (Rent on Amazon for \$23.61)

Plus other readings as assigned and provided for you in the weekly lessons.

Prerequisites

There are no prerequisites for this course.

Technical skills required for this course

As with all online courses, students must be able to operate a computer and have the necessary technical skills to navigate around a web page. Additional technical skills are not a prerequisite for this course, however your computer must meet certain [minimum requirements to operate Blackboard](#).

Time spent on this course

Students can expect to spend a minimum of 6 hours per week to complete all the readings and assignments. The lessons themselves take as long as the student will require to read the materials and watch or listen to media presentations.

Goals, Objectives, and Outcomes

Course Objectives

The fundamental purpose of this course is to familiarize students with concepts associated with the use and proliferation of weapons of mass destruction. It is not intended that this course produce scientists qualified to analyze or develop such weapons, nor is it the intent to provide specific training to first responders who may be called upon in the event a WMD is used.

Therefore, the goals and learning outcomes of this course are:

Objective One: For students to develop an awareness of the wide-ranging nature of weapons of mass destruction.

Objective Two: For students to develop and demonstrate critical thinking and critical writing skills through in-depth responses to proposed discussion topics.

Objective Three: Students will demonstrate knowledge of the specific responses to chemical and biological agents, and radiological and nuclear area denial/destructive devices. Student learning outcomes will be assessed through a combination of written assignments and active participation in the cohort discussions established through discussion board questions each week.

Grading Policies

Angelo State University employs a letter grade system. Grades in this course are determined on a percentage scale: A = 90 – 100 % B = 80 – 89 % C = 70 – 79 % D = 60 – 69 % F = 59 % AND BELOW

This course utilizes both subjective and objective grading to measure a student's comprehension of the materials. Participation in the weekly discussion topics is required. Student participation will be evaluated based upon the attached [grading rubric](#)

Discussion Board

Posts to the discussion board are expected to demonstrate considerable understanding of the required readings, are to be at least 250 words in length, and should employ proper syntax, grammar, English, and punctuation. You will also be graded on your responses to other student postings, which must happen each week. **Discussion board participation accounts for 50% of your overall grade.** Rubrics Discussion forums will be graded using a standardized rubric. It is recommended that you be familiar with these grading criteria and keep them in mind as you complete the writing assignments. Click the link to download the PDF document: [Discussion Rubric](#)

Final Exam

This course employs a final exam. You are not expected to have memorized all the reference and reading materials associated with this course. In fact, you should use some of the easily accessible reference materials such as your textbooks when you take the final exam. However, the final exam is an individual effort and should be completed separately from your classmates. The final exam is comprehensive. It consists of multiple choice and true/false questions. It is a time-limited exam - so be sure that you do not start it unless you have sufficient time to complete it without interruption. **The final exam accounts for 50% of your overall grade.**

Date and Time of Final Exam: **This is an online course. The final exam will be made available for student access on Tuesday of (Week 8) and must be completed by midnight, Friday, of week 8**

I CANNOT EMPHASIZE THE IMPORTANCE OF READING THE ASSIGNED MATERIALS! YOU, VERY LIKELY, CANNOT PASS THE FINAL EXAM WITHOUT HAVING READ THE MATERIALS AND ACQUIRED THE NECESSARY TEXTBOOKS

Course Organization:

Lesson /Week

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| 1 | <p>We open this course with some operational definitions and a look at the different types and categories of Weapons of Mass Destruction. We then proceed into development of a working definition of WMD and determine what constitutes WMD.</p> <p><u>Acquire the 2 required textbooks and begin reading both from the beginning!</u></p> <p>Participate in Discussion #1. Reply to at least 2 of your classmates' initial postings. Post your initial posting by Friday night at midnight and respond to the initial posting by at least 2 other student by the following Monday at midnight.</p> <p><u>Read and understand the entire syllabus.</u></p> <p>Post in the nongraded student posting area on Blackboard if you have questions. Help other students by answering in the nongraded posting area when they have questions!</p> |
| 2 | <p>Understanding the basic chemistry and physics behind conventional explosives is going to be fundamental to understanding how and why certain materials are selected for use, and others avoided. It is also important that students are aware of the process of proliferation. Participate in Discussion #2 if one is posted.</p> <p>Reply to at least 2 of your classmates' initial postings. Pitchel textbook, Chs 1,2,3,4,5,6.</p> |
| 3 | <p>Understanding the basic physics behind nuclear explosives is going to be fundamental to understanding why certain materials are selected for use, and the importance of controlling technology access to the specifics behind manufacturing nuclear devices. The same is true of radiological dispersion devices.</p> <p>Participate in Discussion #3 if one is posted. Reply to at least 2 of your classmates' initial</p> |

postings.

Pitchel textbook, Chs 5,6,7,8 (Yes there will be overlap on the readings!)

Chemical weapons, their threat, and the response protocols for exposure are covered in this lesson. Participate in Discussion #4 if one is posted. Reply to at least 2 of your classmates' initial postings.

Weinstein textbook, Chs 6,7 Pitchel textbook, Sections 3,4,5,6

4

Biological weapons, their threat, and the response protocols for exposure are covered in this lesson. Participate in Discussion #4 if one is posted. Reply to at least 2 of your classmates' initial postings.

Pitchel textbook, Sections 1,2,3,6 Weinstein textbook, Chs 6,7

5

Agroterrorism is a significant threat to any population, everywhere in the world. This lesson addresses the concern of attacks on a country's food industry/supply.

Participate in Discussion #5 if one is posted. Reply to at least 2 of your classmates' initial postings.

6

Response, preparedness, and sheltering from a WMD attack are discussed. Participate in Discussion #6 if one is posted. Reply to at least 2 of your classmates' initial postings.

Pitchel textbook, Ch 9

BE REVIEWING FOR EXAM.

BE REVIEWING FOR EXAM.

7

More on preparedness and dealing with WMD attack.

Participate in Discussion #7 if one is posted.

Reply to at least 2 of your classmates' initial postings.

Pitchel textbook, Ch 10

8

**FINAL EXAM WILL BE MADE AVAILABLE TO STUDENTS ON TUESDAY OF WEEK 8
EXAM MUST BE COMPLETED BY MIDNIGHT, FRIDAY OF WEEK 8**

Administration Communication

Students are expected to participate regularly through the course discussion forum. Students may receive occasional emails from the course instructor and are expected to respond promptly. Asynchronous communication (i.e. face-to-face or "real-time" communication is not required for this course, however your professor is available for phone conversation, chat sessions, or videoconferencing via Blackboard Collaborate during the published office hours, or during other times with prior arrangement. In this class everyone, brings something to the table. Your ideas and thoughts do count, not only to me, but the entire class. Feel free to ask questions either via e-mail or the discussion board. Check the discussion board regularly. Many student questions are applicable to the class as a whole, as are the responses. You may be surprised how many of your classmates have the same questions and concerns as you. I may simply post your particular question on the discussion board and allow your classmates to provide the answer through their own posts.

To some, this may be their first online class and naturally, it could seem somewhat intimidating. As a class, we are together to help each other with this learning process and share our collective knowledge on how best to communicate; how to resolve technical issues that may arise (if we have the expertise), and to assist each other to find answers to our questions.

Courtesy and Respect are essential ingredients to this course. We respect each other's opinions and respect their point of view at all times while in our class sessions. The use of profanity & harassment of any form is strictly prohibited (Zero Tolerance), as are those remarks concerning one's ethnicity, life style, race (ethnicity), religion, etc., violations of these rules will result in immediate dismissal from the course. We will learn and work as a team.

Attendance

This is an online course and attendance is not taken. However, failure to participate in the discussion board, to communicate or respond to e-mails from the professor, is an indication something is wrong. Therefore, we have made both a significant component of the course grade as an enticement to keep you engaged in the learning process. Failure to

participate or communicate on the part of a student will result in an appropriate reduction of your grade and possibly in your failure of this course.

Late Work

You must contact your professor before the assignment is due if you believe it will be late. Failure to do so may result in a zero for the assignment.

Incompletes

The University policy on grades of “Incomplete” is that the deficiency in performance must be addressed satisfactorily by the end of the next long (16 week) semester or the grade automatically becomes a “F”. Grades of “Incomplete” will only be awarded to students who have demonstrated sufficient progress to earn the opportunity to complete the course outside of the normal course duration. The award of an “Incomplete” will only be made in rare circumstances, with the concurrence of the student and the professor on what specific tasks remain and when they are due for the grade to be changed to a higher grade. The determination of the need to award an “Incomplete” is entirely up to the professor’s personal judgment.

University Policies

Academic Integrity

Angelo State University expects its students to maintain complete honesty and integrity in their academic pursuits. Students are responsible for understanding and complying with the university [Academic Honor Code](#) and the [ASU Student Handbook](#). **This definitely includes the avoidance of plagiarism by students.**

Accommodations for Disability

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA), and subsequent legislation.

Student Affairs is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability, and it is the student’s responsibility to initiate such a request by emailing studentservices@angelo.edu, or by contacting:

Office of Student Affairs
University Center, Suite 112
325-942-2047 Office
325-942-2211 FAX

Student absence for religious holidays

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence.