**BARTON COMMUNITY COLLEGE**

**COURSE SYLLABUS**

1. **GENERAL COURSE INFORMATION**

Course Number: MLTR 1921

Course Title: Chemical, Biological, Radiological & Nuclear Defense

Credit Hours: 5

Prerequisites: None

Division and Discipline: Military Programs

Course Description: This course is designed to teach students the primary techniques and skills necessary for analysis, investigation, and defensive operations in areas suspected of chemical, biological, and, nuclear contamination. Through extensive study of each critical area, students will gain the skills necessary to predict and determine the extent of possible damages, losses, and personnel injury in a defined population. Students will learn the fundamental techniques of defensive planning, reporting criteria, and the role of advising senior managers of potential threats and possible courses of action. In addition to extensive lectures, hands-on training will consist of the proper use, maintenance and deployment of monitoring equipment, including decontamination procedures, and personal/organizational protective measures.

1. **INSTRUCTOR INFORMATION**
2. **COLLEGE POLICIES**

Students and faculty of Barton Community College constitute a special community engaged in the process of education. The College assumes that its students and faculty will demonstrate a code of personal honor that is based upon courtesy, integrity, common sense, and respect for others both within and outside the classroom.

Plagiarism on any academic endeavors at Barton Community College will not be tolerated. The student is responsible for learning the rules of, and avoiding instances of, intentional or unintentional plagiarism. Information about academic integrity is located in the Student Handbook.

The College reserves the right to suspend a student for conduct that is determined to be detrimental to the College educational endeavors as outlined in the College Catalog, Student Handbook, and College Policy & Procedure Manual. (Most up-to-date documents are available on the College webpage.)

Any student seeking an accommodation under the provisions of the Americans with Disability Act (ADA) is to notify Student Support Services via email at disabilityservices@bartonccc.edu.

1. **COURSE AS VIEWED IN TOTAL CURRICULUM**

This course serves as an introduction to nuclear, biological, and chemical emergency response and threat operations. This course provides the student the opportunity to gain knowledge and hands-on training in the management of radiological, chemical, and nuclear response operations, to include disposal, monitoring, clean-up, and programs development.

1. **ASSESSMENT OF STUDENT LEARNING**

Barton Community College is committed to the assessment of student learning and to quality education. Assessment activities provide a means to develop an understanding of how students learn, what they know, and what they can do with their knowledge. Results from these various activities guide Barton, as a learning college, in finding ways to improve student learning.

Course Outcomes, Competencies, and Supplemental Competencies:

1. Execute data gathering techniques and concepts.
2. Conduct and supervise radiation monitoring.
3. Prepare nuclear fallout predictions.
4. Conduct and supervise chemical monitoring.
5. Properly operate and maintain chemical and radiological detection equipment.
6. Conduct preventive checks and services on chemical and radiological equipment.
7. Demonstrate how to operate equipment according to the technical manual.
8. Inspect equipment for cleanliness and appropriately store equipment.
9. Conduct and manage emergency response actions.
10. Conduct and supervise radiation monitoring.
11. Prepare nuclear fallout predictions.
12. Conduct and supervise chemical monitoring.
13. Distinguish the types of chemical and biological hazards.
14. Develop an organizational biological and chemical readiness program.
15. Prepare chemical and biological reports.
16. Plot chemical downwind hazards on a map.
17. Execute appropriate actions for radiation hazards.
18. Create and maintain an organizational radiation readiness program.
19. Compare and contrast the differences between radiation and nuclear explosions.
20. Prepare radiological reports.
21. Draw hazard areas for radiation fallout on a map.
22. Identify the effects of radiation on electro optical systems.
23. **INSTRUCTOR’S EXPECTATIONS OF STUDENTS IN CLASS**
24. **TEXTBOOKS AND OTHER REQUIRED MATERIALS**
25. **REFERENCES**
26. **METHODS OF INSTRUCTION AND EVALUATION**
27. **ATTENDANCE REQUIREMENTS**
28. **COURSE OUTLINE**