# BARTON COMMUNITY COLLEGE

**COURSE SYLLABUS**

## GENERAL COURSE INFORMATION

Course Number: HZMT 1919

Course Title: Hazardous Waste Operations & Emergency Response

Credit Hours: 3

Division and Discipline: Environmental Technology

Course Description: This course provides students with an overview of the requirements of 29 CFR 1910.120 for occupational health and safety workers who respond to hazardous waste and chemical spills. Topics include toxicology, chemical awareness, monitoring, personal protective equipment, safety, confined space entry, incident command, site control, medical surveillance, decontamination, safe work practices and emergency procedures.

### CLASSROOM POLICY

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, which is based upon courtesy, integrity, common sense, and respect for others both within and outside the classroom. There will be no eating in the classroom.

The college reserves the right to suspend a student for conduct that is detrimental to the college’s educational endeavors as outlined in the college catalog.

Academic dishonesty on any academic endeavor at Barton Community College will not be tolerated.

Anyone seeking an accommodation under provisions of the Americans with Disabilities Act should notify the college of any special requirements prior to enrollment.

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

Provides students with the necessary knowledge and skills to identify and interpret compliance requirements of 29 CFR 1910.120. This course also meets all requirements of the OSHA HAZWOPER 40-hour certification.

**IV. ASSESSMENT OF STUDENT LEARNING/COURSE OUTCOMES**

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.

Upon completion of this course, the student will be able to identify, interpret, and apply safety measures during a chemical spill or chemical incident.

## COURSE COMPETENCIES

The course is designed to enable students to:

1. Identify resources for information on OSHA standards, EPA, Hazardous Waste Legislation and Safety and Health programs
2. Read and interpret OSHA and EPA regulations as they apply to a hazardous materials release or spill.
3. Perform hazardous waste site analysis
4. Identify and evaluate various types of hazards using site characterization
5. Select and use personal protective clothing
6. Select decon site
7. Setup and operate a decon site
8. Identify the principles of toxicology and describe how they relate to various types of chemical exposures
9. Cite toxicology dose responses, exposure limits, categories of toxic chemical and biological response to chemical exposure
10. Identify labels used in both the DOT and NFPA systems
11. Identify the symptoms and effects of cold and heat injuries during a emergency response incident
12. Identify risks associated with blood borne pathogens and protective measures used
13. Identify potential health hazards of radioactive sources
14. Select and don respiratory equipment to include SCBA
15. Cite the hazards and equipment requirements of confined space entry
16. Monitor air quality at contamination site
17. Document procedures for cite control
18. Interview and record
19. Demonstrate sampling materials for various materials.
20. Identify safe work practices including walking and working surfaces, overhead and underground utilities, tools and heavy equipment, energy sources, lockout-tagout, drum and container handling and transportation of hazardous materials.
21. Demonstrate through an emergency response exercise the formation of teams, briefing procedures, the implementation of a response plan, the evaluation of the performance and the inspection of equipment.

**VI. INSTRUCTOR EXPECTATION OF STUDENTS IN CLASS**

## TEXT AND SUPPLEMENTARY MATERIALS USED IN THE COURSE

**VIII.** **REFERENCES**

**IX. METHODS OF INSTRUCTION AND EVALUATION**

# X. ATTENDANCE REQUIREMENTS

# XI. COURSE OUTLINE