BARTON COMMUNITY COLLEGE
COURSE SYLLABUS

I. GENERAL COURSE INFORMATION

Course Number: HZMT 1919
Course Title: Hazardous Waste Operations and Emergency Response (HAZWOPER)
Credit Hours: 3 credit hours
Prerequisites: none
Division/Discipline: Technical and Military Outreach
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.

II. INSTRUCTOR INFORMATION

Instructor Name:

Contact Data:

III. 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.

IV. COURSE AS VIEWED IN THE TOTAL CURRICULUM

This course 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 Occupational Safety and Health Administration (OSHA) HAZWOPER 40-hour certification.

V. 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:

A. Describe the federal regulations that apply to hazardous waste operations and emergency response procedures.
   1. Identify resources for information on OSHA standards, Environmental Protection Agency (EPA), Hazardous Waste Legislation and Safety and Health programs.
   2. Describe how OSHA and EPA regulations apply to a hazardous materials release or spill.

B. Explain the procedures necessary to prepare for operations on a waste site.
   1. Perform hazardous waste site analysis.
   2. Identify and evaluate various types of hazards using site characterization techniques.
   3. Select and demonstrate proper use of personal protective clothing.
   4. Select and don respiratory protection equipment to include self-contained breathing apparatus (SCBA).
   5. Demonstrate through an emergency response exercise the formation of teams, briefing procedures, the implementation of a response plan, the evaluation of the performance and inspection of equipment.
   6. Describe the sampling equipment required for collecting various types of materials on a waste site.
   7. Demonstrate the proper methods for monitoring air quality at a contamination site.
   8. Explain and demonstrate procedures for site control.

C. Describe the appropriate decontamination procedures for a chemical spill.
   1. Select an appropriate location for a decon site based on a given situation.
   2. Demonstrate the proper setup and operation of a decontamination site.

D. Explain hazard recognition concepts as they relate to chemical spill mitigation.
   1. Identify the principles of toxicology and describe how they relate to various types of chemical exposures.

2. Cite toxicology dose responses, exposure limits, categories of toxic chemical and biological response to chemical exposure.
3. Identify the labels used in both the DOT and National Fire Protection Association (NFPA) systems.

E. Identify, interpret, and apply the appropriate safety measures during a chemical spill or chemical incident.
   1. Identify the symptoms and effects of cold and heat emergencies during an emergency response incident.
   2. Identify the risks associated with blood-borne pathogens and protective measures used.
   3. Identify the potential health hazards of radioactive sources.
   4. Identify safe work practices including walking and working surfaces, overhead and underground utilities, tools and heavy equipment, energy sources, lock-out tag-out, drum and container handling and transportation of hazardous materials.

VI. INSTRUCTOR'S EXPECTATIONS OF STUDENTS IN CLASS

VII. TEXTBOOKS AND OTHER REQUIRED MATERIALS

VIII. REFERENCES

IX. METHODS OF INSTRUCTION AND EVALUATION

X. ATTENDANCE REQUIREMENTS

XI. COURSE OUTLINE