BARTON COMMUNITY COLLEGE
COURSE SYLLABUS

I. GENERAL COURSE INFORMATION

Course Number: HZMT 1911
Course Title: Emergency Response to Chemical Spills
Credit Hours: 3
Prerequisites: None
Division/Discipline: Environmental Technology
Course Description: This course provides students with an overview of the requirements of 29 CFR 1910.120 (g) for Emergency Responders (Spill Response Teams, Hazmat Teams, Fire Fighters, EMS, FEMA personnel or Policeman) who respond to chemical spills. Topics include levels of releases, emergency response plan, environmental spill response, incident command system, toxicology, chemical awareness, monitoring, personal protective equipment, safety, site control, types of decontamination, emergency spill containment procedures.

II. INSTRUCTOR INFORMATION

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

The information presented in this course provides students with the necessary knowledge and skills to identify and interpret compliance requirements of 29 CFR 1910.120 (g) and state and local requirements. This course also meets all requirements of the OSHA Emergency Response, 24-hour Technician 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. Explain the federal regulations that apply to the process of managing chemical spills.
   1. Identify resources for information on Occupational Safety and Health Administration (OSHA) standards, Environmental Protection Agency (EPA) regulations, and federal and state hazardous waste legislation and safety and health programs.
   2. Read and interpret OSHA and EPA regulations as they apply to an uncontrolled hazardous materials release or spill.

B. Identify, isolate, and contain uncontrolled chemical spills while implementing procedures to protect the local community and environment.
   1. Perform emergency spill response procedures.
   2. Implement the Incident Command System (ICS) at an uncontrolled chemical spill incident.
   3. Identify and evaluate various types of hazards using site characterization.
   4. Select and use personal protective clothing.
   5. Select and don respiratory protection equipment, to include self-contained breathing apparatus (SCBA).
   6. Demonstrate through a chemical spill exercise, the formation of teams, briefing procedures, the implementation of a work plan, and evaluation of the performance and inspection of the equipment.

C. Describe the appropriate decontamination procedures for a chemical spill.
   1. Select an appropriate decontamination site.
   2. Setup and operate 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 labels used in both the Department of Transportation (DOT) and National Fire Protection Association (NFPA) systems.
4. Identify potential health hazards of radioactive sources.

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