BARTON COMMUNITY COLLEGE
COURSE SYLLABUS

I. GENERAL COURSE INFORMATION

Course Number: HZMT 1917
Course Title: Department of Transportation Regulations
Credit Hours: 1-3 Cr. hours (Variable)
Prerequisites: None
Division/Discipline: Technical and Military Outreach
Course Description: This course provides a study of the U.S. Department of Transportation (DOT) hazardous materials regulation. An emphasis will be placed on the general awareness and familiarization of hazardous materials, hazard communication, emergency response and safety, and any specific modal (air, rail, highway, and water) regulatory requirements for hazardous materials that is prepared for commercial or private transport.

II. INSTRUCTOR INFORMATION

III. 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 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 an overview of the hazardous materials regulation, the 49CFR (Code of Federal Regulation), for preparing hazardous materials for transportation in the United States, with regards to the "Federal Hazardous Materials Law." Students will be enabled to research the requirements for preparing a hazardous material for transport purposes. The course will discuss the training requirements for a hazardous material employee, as well as focus on the specific requirements when transporting by air, rail, highway, or water.

V. ASSESSMENT OF 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.

<u>Course Outcomes, Competencies, and Supplemental Competencies:</u>

A. Use the 49 CFR (Code of Federal Regulation) hazardous materials regulations to locate given sections and information in the regulation.
   1. Define the term "hazardous material."
   2. List the civil and criminal penalties for violating the hazardous materials regulation.
   3. Identify the nine hazard classifications for a hazardous material.

B. Use the Hazardous Materials Table to identify if an item is regulated as a "hazardous material".
   1. Explain the information listed in the ten columns of the hazardous materials table.
      i. Use Appendix A to identify if an item is regulated as a hazardous substance.
      ii. Use Appendix B to identify if an item is regulated as a marine pollutant
   2. Use the Special Provision table to identify any required applications or conditions for a hazardous material.
      i. Explain the different types of codes that are in the table.

C. Identify the different hazardous materials communication standards used to notify the general public of a hazardous materials shipment.
   1. Explain a shipping paper and its purpose.
      i. List the information required to describe a hazardous material on shipping paper.

ii. Identify any additional information that is required to be added to a shipping description.
iii. Explain the retention requirements for hazardous materials and hazardous wastes documents.
iv. Explain how a shipper certifies a hazardous material shipment.

2. Explain information required on the outside of a package containing a hazardous material.
3. Explain how to select a hazard warning label used to communicate the hazard(s) of a given material.
   i. Explain where hazard warning labels are placed on a package.
   ii. List the shape and dimensions for a hazard warning label.
   iii. List any prohibitions that apply to labeling a hazardous material.
4. Explain hazard warning placards and how they are used to communicate the hazards of dangerous good shipments being transported by motor vehicles, railcars, and other transport devices.
   i. Explain where hazard warning placards are displayed.
   ii. Explain the placarding required by Tables 1 and 2 in the 49 CFR.
   iii. Describe the specifications for the shape and size of a hazard warning placard.

D. Identify the training requirements for a “hazmat employee”.
   1. List and describe the specific training requirements for a hazmat employee.
   2. Explain how often an employee must be retrained.
   3. List who is responsible for providing the hazardous materials training.
   4. Explain how long the training records are retained by an employer.
      i. Identify the information required to be entered on a training record.

E. Use the hazardous materials regulation to determine the authorized package(s) used to contain and transport a hazardous material.
   1. Explain how to use the hazardous material regulation to find what package is required to contain a hazardous material.
      i. Define the term “packaging”.
      ii. Define the term “package”.
      iii. Define the term “bulk packaging”.
      iv. Define the term “non-bulk packaging”.

F. List and explain the segregation requirements for hazardous materials that are being transported by air, rail, highway, and water.
   1. List what hazardous materials can be transported together on the same motor vehicle.
   2. List what hazardous materials can be transported on a railcar.
      i. Explain where to position railcars in a locomotive train.
   3. List what hazardous materials can be stowed next to each other on an aircraft.
   4. List what hazardous materials can be stowed together on a vessel.
      i. Explain where the items are required to be located on a vessel.
      ii. Explain the terms:

a. “Away from”
b. “Separated from”
c. “Separated by or hold from”
d. Separated longitudinally by an intervening compartment or hold from”

G. Identify any material(s) or condition(s) where a hazardous material maybe excepted from the compliance of the hazardous materials regulation.
1. Explain what a “Limited Quantity” is.
2. Explain what a “Small Quantity” is.
3. Define ORM (other regulated material) and how it is excepted from the hazardous material regulation.

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