

El Paso Community College
Syllabus
Part II
Official Course Description

SUBJECT AREA	<u>Fire Technology</u>
COURSE RUBRIC AND NUMBER	<u>FIRT 1315</u>
COURSE TITLE	<u>Hazardous Materials I</u>
COURSE CREDIT HOURS	<u>3 3 0</u> Credits Lec Lab

I. Catalog Description

Studies the chemical characteristics and behavior of various materials. Includes topics on storage, transportation, handling hazardous emergency situations, and the most effective methods of hazard mitigation. **(3:0)**.

II. Course Objectives

Upon satisfactory completion of this course, the student will be able to:

- A. Section 601, National Fire Protection Association Standard (NFPA) 472
 - 1.00 Define Hazardous Materials Technician.
 - 2.00 Identify the goals of the Hazardous Materials Technician.
 - 3.00 Identify the purpose of NFPA Standard 472.
 - 4.00 Identify the levels of competency for responders to hazardous materials incidents.
 - 5.00 Identify the five distinct competency sections of NFPA Standard 472, Chapter 4.
- B. Section 602, Superfund Amendment Reauthorization Act (SARA)
 - 1.00 Identify the sections of Superfund Amendment Reauthorization Act (SARA) Title I as they relate to the emergency responder to hazardous substance releases.
 - 2.00 Identify the sections of Superfund Amendment Reauthorization Act (SARA) Title III.
 - 3.00 Describe the importance of EPA 40 CFR 311 (OSHA 29 CFR 1910.120. “Hazardous Waste Operations and Emergency Response”) as it relates to the emergency responder to hazardous substance releases.
- C. Section 604 – Collecting and Interpreting Hazard and Response Information.
 - 1.02 Define the chemical/hazardous materials terms and be able to identify their significance in the risk assessment process.
 - 1.04. Given five (5) hazardous materials scenarios and the appropriate reference materials, identify the signs and symptoms of exposure to each material and the target organ effects of exposure to that material.

- 4.03. Describe toxicological terms and exposure values and explain their significance in the risk assessment process.
- 4.04. Describe radioactive terms and explain their significance in predicting the extent of health hazards and environmental impact in a hazardous materials incident.
- D. Identify the hazards of radioactive materials and know how to handle them under varying conditions.
- E. Identify hazardous solids, liquids and gases and know how to handle them under varying conditions.
- F. Use those units of measurement appropriate in science in general, and hazardous materials emergency response in particular.
- G. Classify hazardous solids, liquids and gases and list the common properties associated with those hazardous material classes.
- H. Classify explosions and identify various types of explosive materials.
- I. Identify the characteristics of a good extinguishing agent and oxidizing agent.
- J. Utilizing the DOT current Emergency Response Guidebook, demonstrate how to respond and assess the dangers associated with a specific hazardous chemical incident.

III. THECB Learning Outcomes (WECM)

- 1. Identify hazardous materials in various shipping and storage containers.
- 2. Explain chemical characteristics.
- 3. Explain how chemicals react under certain conditions.
- 4. Describe the most effective methods of hazard mitigation.

IV. Evaluation

Attendance Policy: Students absent for two more class periods without a valid excuse as determined by the instructor may be dropped from the course. Any exam or assignment not completed as a result of an unexcused absence will receive a grade of "0" for that exam or assignment.

Students who do not attend class before or on the census date listed in the Credit Course Schedule and the Course Calendar and have not contacted the instructor with a valid excuse will be dropped from the course.

Tardiness Policy: Students must be seated and ready to begin class at the scheduled time. Students tardy for two or more class periods without a valid excuse as determined by the instructor may be dropped from the course.

Expect class to last the entire scheduled time. Students may not leave class early without a valid excuse or without having made arrangements with the instructor. Students doing so will be considered absent for that class period.

Withdrawal Policy: Students who desire to withdraw are responsible for initiating withdrawal action through the EPCC Registrar's Office according to the policy in the Credit Class Schedule. **After the drop date listed in the Credit Class Schedule and the Course Calendar, students will receive a grade based upon all required items. Items not completed will be given a grade of "0".**

Students requesting an Incomplete, "I", must comply with EPCC policies and procedures listed in the Credit Class Schedule.

Cheating Policy: Students determined to be cheating on an exam or plagiarizing another student's assignment will be given a grade of "0" for that exam or assignment. An incident report documenting the circumstances will be prepared by the Instructor and submitted to the Instructional Coordinator of Fire Technology and then forwarded to the Instructional Dean Occupational Education. A copy of the report will be provided to the student. A second such incident will be grounds for dismissal of the student from the course with a grade of "F".

Grading Scale

A: 90 – 100 B: 80 - 89 C: 75 - 79 D: 70 - 74
F: 0 - 69

V. Disability Statement (Americans with Disabilities Act [ADA])

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

VI. 6 Drop Rule

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.