

El Paso Community College
Syllabus
Part II
Official Course Description

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|---------------------------------|---|-----------------|-----------------|----------|-----------------|----------------|------------|--|------------|
| SUBJECT AREA | <u>Fire Technology</u> | | | | | | | | |
| COURSE RUBRIC AND NUMBER | <u>FIRT 1303</u> | | | | | | | | |
| COURSE TITLE | <u>Fire and Arson Investigation I</u> | | | | | | | | |
| COURSE CREDIT HOURS | <table border="0" style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;"><u>3</u></td> <td style="text-align: center;"><u>3</u></td> <td style="text-align: center;">:</td> <td style="text-align: center;"><u>0</u></td> </tr> <tr> <td style="text-align: center;">Credits</td> <td style="text-align: center;">Lec</td> <td></td> <td style="text-align: center;">Lab</td> </tr> </table> | <u>3</u> | <u>3</u> | : | <u>0</u> | Credits | Lec | | Lab |
| <u>3</u> | <u>3</u> | : | <u>0</u> | | | | | | |
| Credits | Lec | | Lab | | | | | | |

I. Catalog Description

Studies basic fire and arson investigation practices. Emphasizes fire behavior principles related to fire cause and origin determination. **(3:0)**.

II. Course Objectives

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

- A. Identify agencies that can provide information and assistance in arson investigation, causes and prevention of fire and the percentage of fires that are determined to be incendiary and suspicious in Texas.
- B. Identify and describe the process of combustion, including the definition of key terms, fire theory, energy sources, methods of heat transfer, the characteristics of fire, fuels, flammable and combustible liquids, oxidizers, plastics and combustible metals that are associated with fire science.
- C. Identify and describe the classifications of building construction, structural load and loading, significant building elements, fire behavior expected with each type of construction, and the various systems for structural fire protection.
- D. Identify and explain hazards and safeguards of various appliances, electrical theory and indicators of damage to electrical systems, sources of spontaneous heating, and examples of smoking, low temperature ignition, and unprotected flames and sparks as fire origin.
- E. Identify sources for obtaining insurance information, and what information that can be obtained from an insurance policy.
- F. Define terms associated with fire setting and identify and describe motives encountered in fire setting.
- G. Describe, define, and explain investigative procedures concerning fire fighting operations, including, how to secure the incident scene, what information needs to be collected, what individuals are to be interviewed, scene reconstruction.
- H. Describe procedures for obtaining information regarding hazardous materials involved at an incident scene.
- I. Identify and describe agencies that provide technical assistance and expertise related to causes of non-residential and rural fires and characteristics and guidelines for using indicators to locate cause and origin of wildland fires.
- J. Identify and describe sources of information relating to vehicles and their operations, ignition sources, indications of fire causes, operations of vehicle systems.
- K. Describe methods of examining for indicators of accidental or incendiary fires and resources that can provide information concerning identification numbers on vehicles.

- L. Define, describe and explain the term explosion, various types and characteristics of explosions, procedures for securing the scene, methods used to conduct and investigations of an explosion scene, and information related to explosive devices and incidents.

III. THECB Learning Outcomes (WECM)

1. Identify the point of origin and the cause of the fire.
2. List possible motives of fire setters.
3. Describe the elements of investigation practices.

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.