



El Camino College
COURSE OUTLINE OF RECORD – Official

Subject:	FTEC
Course Number:	150
Descriptive Title:	Fire Specialized Training
Division:	Health Sciences and Athletics
Department:	Fire and Emergency Technology
Course Disciplines:	Fire Technology
Catalog Description:	<p>This course will acquaint the student with current changes in contemporary fire fighting techniques. Major topics include fire service appliances, fire chemistry, automatic fire extinguishers and agents. Additional topics include fire prevention and enforcement, arson investigation, public safety, hazardous materials control and enforcement, communication and emergency medical techniques.</p> <p>Note: Pass/no pass only</p> <p>Note: This course is repeatable</p>
Prerequisite:	<ol style="list-style-type: none"> 1. Successful completion of a California State Fire Marshal certified fire academy. 2. Proof of passing the Emergency Medical Technician (EMT) National Registry Examination. 3. Furnish proof of a current negative Tuberculosis Test (TB). Test must taken within 12 months and valid during class period. 4. Completion of background investigation. Background investigation to be completed prior to attending the first class session. See the Division Office of Industry and Technology for details.
Co-requisite:	
Recommended Preparation:	
Enrollment Limitation:	
Hours Lecture (per week):	1
Hours Laboratory (per week):	4
Outside Study Hours:	2
Total Hours:	126
Course Units:	2
Grading Method:	Pass/No Pass only
Credit Status:	Credit, degree applicable
Transfer CSU:	Yes
Effective Date:	4/12/1999
Transfer UC:	No
Effective Date:	
General Education: ECC	

Term:	
Other:	
CSU GE:	
Term:	
Other:	
IGETC:	
Term:	
Other:	
Student Learning Outcomes:	<p>SLO #1 Master Steam Appliance</p> <p>Student will place a master stream appliance in service. The student will choose the correct length of hose; select the required equipment; and calculate the appropriate nozzle size.</p> <p>SLO #2 Breathing Equipment</p> <p>The student will don a self-contained breathing apparatus within the department's specified timeframe.</p> <p>SLO #3 Ladders</p> <p>The student will select the appropriate size ladder to reach the roof of a single family residence.</p>
Course Objectives:	<ol style="list-style-type: none"> 1. Arrange in order the proper procedures for donning self-contained breathing apparatus. 2. Set up all equipment necessary for a forward hose lay. 3. Select the appropriate type and length of a ladder to use for a simulated emergency incident. 4. Compare and contrast the chemical and physical properties of hazardous materials. 5. Evaluate the use and features of commonly used fire service nozzles. 6. Examine the correct procedures to be used when administering adult and infant Cardio Pulmonary Resuscitation (CPR). 7. Calculate the required fire flow for a 10,000 square foot single story type II building. 8. Compare and contrast various types of building construction. 9. Analyze and explain the function of a centrifugal fire pump.
Major Topics	<p>I. BREATHING EQUIPMENT (1 hour, lecture)</p> <ol style="list-style-type: none"> A. Maintenance B. Donning and duffing C. Uses <p>II. BREATHING EQUIPMENT (4 hours, lab)</p> <ol style="list-style-type: none"> A. Maintenance B. Donning and duffing C. Uses <p>III. FIRE APPARATUS DRIVING (1 hour, lecture)</p> <ol style="list-style-type: none"> A. Vehicle laws B. Testing C. Operating <p>IV. FIRE APPARATUS DRIVING (4 hours, lab)</p> <ol style="list-style-type: none"> A. Vehicle laws B. Testing

C. Operating

V. FIRE SUPPRESSION (5 hours, lecture)

- A. Operations
- B. Size up
- C. Methods
- D. High rise

VI. FIRE SUPPRESSION (20 hours, lab)

- A. Operations
- B. Size up
- C. Methods
- D. High rise

VII. PREVENTION (5 hours, lecture)

- A. Fire prevention programs
- B. Inspections
- C. Reports

VIII. FIRE PREVENTION (5 hours, lab)

- A. Fire prevention programs
- B. Inspections
- C. Reports

IX. EMERGENCY MEDICAL SERVICE (EMS) (3 hours, lecture)

- A. Emergency Medical Technician (EMT) skills
- B. Equipment
- C. Patient assessment

X. EMERGENCY MEDICAL SERVICE (EMS) (12 hour, lab)

- A. Emergency Medical Technician (EMT) skills
- B. Equipment
- C. Patient assessment

XI. HAZARDOUS MATERIALS (1 hour, lecture)

- A. Identification
- B. Method of handling
- C. Mitigation techniques and storage requirements

II. HAZARDOUS MATERIALS (9 hours, lab)

- A. Identification
- B. Method of handling
- C. Mitigation techniques and storage requirements

XIII. HOSE (1 hour, lecture)

- A. Hose lay evolutions
- B. Testing
- C. Maintenance and care

XIV. HOSE (9 hours, lab)

- A. Hose lay evolutions
- B. Testing

	<p>C. Maintenance and care</p> <p>XV. LADDERS (1 hour lecture)</p> <p>A. Straight ladders B. Extension ladders C. Aerial ladders</p> <p>XVI. LADDERS (9 hours, lab)</p> <p>A. Straight ladders B. Extension ladders C. Aerial ladders</p>
Total Lecture Hours:	36
Total Laboratory Hours:	0
Total Hours:	36
Primary Method of Evaluation	3) Skills demonstration
Typical Assignment Using Primary Method of Evaluation:	Prepare and submit a one - two page list of the uniform fire codes relative to the storage and handling of flammable liquids and gases in a bulk storage facility.
Critical Thinking Assignment 1:	Given a hose layout at a fire, mentally calculate the correct pumping pressure. Verbally communicate the correct answer to the instructor.
Critical Thinking Assignment 2:	Presented with a description of simulated structure fire, identify and select the correct ventilation method. Prepare and submit a one - two page report discussing your conclusions.
Other Evaluation Methods:	Class Performance, Fieldwork, Other (specify)
Instructional Methods:	Field trips, Group Activities, Lecture, Multimedia presentations
If other:	
Work Outside of Class:	Observation of or participation in an activity related to course content (such as theatre event, museum, concert, debate, meeting), Problem solving activity, Required reading, Skill practice, Study
If Other:	
Up-To-Date Representative Textbooks:	International Fire Training Service Association. <u>ESSENTIALS OF FIRE FIGHTING</u> . 7 th Edition International Fire Training Service Association, 2019
Alternative Textbooks:	
Required Supplementary Readings:	
Other Required Materials:	
Requisite:	
Category:	
Requisite course(s): List both prerequisites and corequisites in this box.	
Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).	
Requisite:	A student would have extreme difficulty passing this course without the benefit of completing a State Fire Marshal approved Fire Academy. A Fire Academy acquaints the student with fire fighting tools and equipment; industry terminology; procedures for

	<p>combating Class A; Class B; Class C; and Class D fires; utility emergencies; vehicle extrication; and a myriad of other subjects a fire fighter must accomplish before entering this field. Without this knowledge, it is highly likely the student will suffer serious injury, or perhaps death, while performing the duties of a fire fighter.</p> <p>A student taking this class must have the knowledge to pass the Emergency Medical Technician (EMT) National Registry Exam. This requirement is necessary because the majority of emergency incidents the students will respond to in the field are medical in nature. For example, a student may be confronted with diagnosis of an unconscious patient. Failure to have the correct EMT skills to diagnose the patient may result in providing inappropriate treatment further complicating the patient's condition.</p> <p>A student must show proof of a negative TB test. Due to the fact that the majority of the emergency incidents the students will respond to in the field are medical in nature, students may become exposed to tuberculosis. This requirement is to protect the student's health. This is a California OSHA mandate.</p> <p>Students who have a criminal record are not permitted to work in the fire industry if they possess a felony conviction or possess some misdemeanors. A background investigation is completed to protect the public.</p>
Requisite and Matching Skill(s): Bold the requisite skill(s). If applicable	
Requisite course:	
Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s).	<p>1.Successful completion of a California State Fire Marshal approved fire academy or equivalent.</p> <ul style="list-style-type: none"> a. Don breathing apparatus in the approved manner. b. Demonstrate the correct procedure for performing the apparatus pre-trip inspection. c. Identify the nine hazardous materials categories. d. Diagram the correct method for performing a forward hose lay. e. Identify the essential components of a 35' extension ladder. <p>FTEC 15 - Utilize a self-contained breathing apparatus.</p> <p>2. Proof of passing the Emergency Medical Technician (EMT)National Registry Examination</p> <ul style="list-style-type: none"> a. Perform adult CPR on a mannequin. b. Demonstrate the correct procedure for obtaining a blood pressure. c. Apply the Hare Traction splint on a simulated patient. d. Diagram the Mass Casualty Incident Command System. e. Identify the signs of hypothermia. <p>FTEC 15 - Explain the roles and responsibilities of firefighters in the incident command system.</p>
Requisite:	
Requisite and Matching skill(s): Bold the requisite skill. List the corresponding course objective under each skill(s). If applicable	

Enrollment Limitations and Category:	
Enrollment Limitations Impact:	
Course Created by:	Craig Neumann
Date:	09/01/1998
Original Board Approval Date:	04/12/1999
Last Reviewed and/or Revised by:	Ryan Carey
Date:	05/09/2021
Last Board Approval Date:	06/21/2021