Attachment 2

Exhibit A-Courses approved for ISA offerings

Exhibit	Course Number	Course Name	Units	Contact Hours
B	FIRE-58	Firefighter Basic Skills	9	216
C	FIRE-63A	Basic Firefighter I, Academy A	8	180
D	FIRE-63B	Basic Firefighter I, Academy B	8	180
E	FIRE-65C	Wildland Firefighting Strategy and Tactics	1	18
F	FIRE-65E	Introduction to Hazardous Materials Awareness	0.5	9
G	FIRE-65F	Hazardous Materials-First Responder Operations (HM F.R.O)	1	20
H	FIRE-65G	First Responder Operations-Decontamination (DECON FRO)	0.5	9
I	FIRE-66D	Equipment Operator for Volunteer Firefighters	2	36
J	FIRE-67A	Low-Angle Rope Rescue, Operational	1	18
K	FIRE-67B	Auto Extraction	0.5	9
L	FIRE-68B	Basic Incident Command System (I-200)	1	18
M	FIRE-68C	Incident Command System-Intermediate (I-300)	1.5	27
N	FIRE-68D	Advanced Incident Command System (I-400)	2	36
O	FIRE-69A	First Responder Medical	2.5	45
P	FIRE-69B	First Responder Re-Certification	1.5	27
Q	FIRE-71A	Fire Instructor I	2.25	40.5
R	FIRE-71B	Fire Instructor II	2	36
S	FIRE-72A	Fire Command- Module A	2	40
T	FIRE-72B	Fire Command- Module B	2	40
U	FIRE-73A	Fire Inspector 1A	2	40
V	FIRE-73B	Fire Inspector 1B	2	40
W	FIRE-75	Fire Management I-Management for Company Officers	2	40
X	FIRE-76A	Fire Apparatus Driver/Operator 1A (Emergency Vehicle Op)	2	40
Y	FIRE-76B	Fire Apparatus Driver/Operator 1B (Pump Op)	2	40
Z	EMER-52	Emergency Medical Technician 1 Refresher	1.5	27

Exhibit B

Merced College

Course Outline of Record Report

06/29/2022

FIRE-58 : Firefighter Basic Skills

General Information

Author:	• Bryan Donnelly
Course Code (CB01) :	FIRE-58
Course Title (CB02) :	Firefighter Basic Skills
Cohort:	Fire Technology
Proposal Start:	2022U
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	Clearly Occupational

Distance Education Approved: No

Course Control Number (CB00) :CCC000630831

Curriculum Committee Approval

Date:02/17/2022**Board of Trustees Approval**

Date:03/08/2022 **External Review Approval**

Date:02/17/2022 **Course Description:**	Provides the firefighter with basic knowledge of fire behavior and control and basic skills to safely perform essential fire ground tasks with minimal supervision. Student must supply instructor-approved personal protective equipment (required instructional supply).
Submission	Improvement to Program of Study
	Changes in hours and state required curriculum for firefighter state certifications. Formerly FIRE-66A
Author:	• Bryan Donnelly

Faculty Requirements

Master Discipline	• Fire Technology

Alternate Master Discipline Preferred: No value

Bachelors or Associates Discipline Preferred: No value

Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Pass/No Pass
- Letter Grade Methods

☐ Allow students to gain Credit for Prior Learning (CPL)

Allowed Number of Retakes

0

Course Prior To College Level (CB21)

Not applicable.

Credit for Prior Learning assessmentmethods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

Course is not a support course

Associated Programs

☐ Course is part of a program (CB24)

Associated Program

No value

Award Type

Activ

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

Not Applicable

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07)	9
Maximum Credit Units (CB06)	9
Total Course In-Class (Contact) Hours	216
Total Course Out-of-Class Hours	270
Total Student Learning Hours	486
Faculty Load	0

Credit / Non-Credit Options

Course Credit Status (CB04)
Credit - Degree Applicable

Course Non Credit Category (CB22)
Credit Course.

Non-Credit Characteristic
No Value

Course Classification Code (CB11)
Credit Course.

Funding Agency Category (CB23)
Not Applicable.

☐ Cooperative Work Experience Education Status (CB10)

☐ Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	7.5	15
Laboratory Hours	4.5	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	135
Laboratory	81
Activity	0
Total	216

Course Out-of-Class Hours

Lecture	270
Laboratory	0
Activity	0
Total	270

Time Commitment Notes for Students

Evenings and weekends. Weekends are 8 hr. days

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity	Type	In Class	Out of
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85AC - Accelerated Foundations in Academic Literacy

Outcomes

- Use preview and reading techniques to facilitate understanding of a variety of texts.
- Apply critical thinking strategies to make connections between ideas in texts, demonstrating understanding through textual annotation.
- Analyze texts to unlock meaning and deepen understanding.
- Evaluate texts.
- Synthesize ideas and information to develop one?s own viewpoint on a topic.
- Compose a range of thesis-driven, academic writing assignments using the writing process.

Entrance Skills

Entrance	Descriptio
No value	No value

Limitations on Enrollment

Limitations on	Descriptio
Must pass requirements for the volunteeragency representing.	No Value

Specifications

Methods of Instruction	Lecture
Rational	No value
Methods of	Other
Rational	Other - Problem Solving
Methods of	Other
Rational	Other - In class individual, small and large group activities

Methods of Instruction	Other
Rationale	Other - Demonstration of containment and extinguishment techniques
Methods of Instruction	Other
Rationale	Other - Demonstration of rescue techniques
Methods of Instruction	Other
Rationale	Other - Video

Assignments

READING
1. Handouts
WRITING
1. Departmental forms
OUTSIDE
1. Skill practice
2. Studying notes and handouts
CRITICAL THINKING
1. In given scenarios, demonstrate the ability to appropriately apply knowledge and skills to simulated situations.

Methods of Evaluation	Rationale
Class Participation	No value
Other	Other - Student demonstration of Manipulative skills (testing)
Written examinations	No value
Other	Other - Written assignments

Equipment

Students must supply instructor approved personal protective equipment (required instructional material).

Textbooks

Author	Title	Publisher	Date	ISBN
NFPA/International Association of Fire Chiefs	Fundamentals of Firefighter Skills	Jones and Bartlett	2017	978-1-284-09821-1

Other Instructional Materials

No Value

Materials
Fee

Learning Outcomes and Objectives

Course

To attain the knowledge and skills base to meet certification standards for Paid Call Firefighter

CSLOs

Evaluate various fire and rescue situations and apply the appropriate tactics and Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Demonstrate the appropriate inspection, donning, and use of protective Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Compare the limitations and benefits of different water Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Recognize basic fire related building construction structural Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Outline

Course Outline

I. Fire Service Organization and Responsibility
- A. Mutual aid agreements
- B. Concepts of Incident Command System Organization

II. Fire Protection and Safety
- A. Respiratory hazards:
  - 1. Physical effects
  - 2. Mental effects
- B. LDLH
- C. Personal Protective Equipment
  - 1. Structure protective clothing

2. Wildland safety uniform

III. Vehicle Fires

A. Heating and expanding hydraulic systems
B. Flammable liquids within systems
    1. Vapor density
C. Battery as a container of hazardous materials
    1. Sulfuric acid
    2. Creation of hydrogen - flammable gas
D. Hybrid and electric vehicles
E. Polyvinyl chloride
F. Air bags
G. Trunks - unknown dangerous cargo
H. Underside fuel storage area
    1. Gasoline
    2. Diesel
    3. Propane
    4. Methanol
    5. Electricity
    6. Steam
I. Trailers
J. Extinguishment

IV. Fire Behavior and Control

A. Basic Fire Chemistry
B. Products of Combustion
C. Phases of a fire
D. Fundamentals of Heat Transfer
E. Pyrolysis, Flashover and Backdraft
F. BLEVE
G. Classification of Fire and Common Extinguishing Agents
H. Physics of Fire

V. Extinguishing Agents

VI. Fire Hose Appliances

A. Fire Hose Construction and Care
B. Care of Hose Couplings
C. Operating a 2 '12 inch hose clamp
D. HoseLoads
    1. Flat
    2. Merced County
    3. Horseshoe
    4. LDH
E. Hose Clamps and Various Hose loads

VII. Self Contained Breathing Apparatus

A. SCBA types and Components
B. Sigma SCBA
    1. Donning
    2. Cleaning
    3. Inspecting

VIII. Water Supply and Fire Streams

A. Water Distribution Systems
B. Wet and Dry Barrel Hydrants
C. Causes of Pressure Loss in Water Systems
D. Fire Streams
E. Nozzles, Types, Uses and Safety Precautions

IX. Ropes and Knots

A. Fire Service Rope Construction and Use
B. Fire Service Knots, Basic Terminology

X. Search and Rescue

A. Structure Fire Search and Rescue Tactics
B. Ladders
C. Types of Fire Service Ground Ladder Safety Practices

XI. Building Construction

A. Structural Design
B. Construction Characteristics
C. Terminology
D. Structural Components
E. Truss Roof Collapse

XII. Salvage and Overhaul

A. Safety Consideration
B. Indications of Potential Building Collapse
C. Searching for Hidden Fires
D. Procedures for Extinguishing Hidden Fires
E. Procedures for Making Buildings and Areas Safe After an Emergency
F. Common Fire Service Salvage Equipment
G. Grouping Building Contents for Salvage

XIII. Ventilation

A. Structure Fire Ventilation
    1. Vertical ventilation
    2. Horizontal ventilation
    3. Long distance opening
    4. Natural ventilation
    5. Mechanical ventilation
        a. Heating, ventilation, and air conditioning
        b. Smoke fans
        c. Water
B. Roof ventilation
    1. Expandable cut
    2. Center Rafter Cut
    3. Triangular cut
    4. Trench cut or strip cut
C. Obstacles to ventilation
    1. Access
    2. Security devices
    3. Height
    4. Planning
    5. Personnel assignment
    6. Unfamiliar building layout
    7. Ventilation timing
D. Forcible Entry
    1. Forcible Entry Tools
    2. Breaking or Pulling Locks
    3. Forcing overhead doors
    4. Breaking Window Glass
    5. Opening Walls
    6. Opening Sheetrock Ceilings

IX First Responder Medical

DE Addendum Revisions

Response #1: Explain how time and/or distance will separate the instructor and students. Definition and Application as defined by Title5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

No Value

Specify "Other" here:

No Value

Response #2: Explain how the instructor will distribute the required number of unit hours per week using technology. Definition andApplication as defined by Title 5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

No Value

Specify "Other" here:

No Value

Response #3: Explain how the instructor will meet ADA requirements in designing this course. Course Quality Standards as defined byTitle 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply)

No Value

Response #4: Explain how the instructor's course will meet the same quality standards as an in-person counterpart. Course Quality Standards as defined by Title 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply) • The online coursewill offer:

No Value

5pecify "Other" for Response #3 here:

No Value

Specify "Other" for Response #4 here:

No Value

Response #5: Explain how the instructor will conduct regular and effective contact between the instructor and students. Please includethe time frame parameters. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – select all that apply)

No Value

Specify "Other" here:

No Value

Response #6: Explain how the instructor will promote regular and effective contact among students either synchronously or asynchronously. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – selectall that apply)

No Value

Specify "Other" here:

No Value

Response #7: This course will strive to meet the quality standards for alignment at 100% as set forth in the CVC-OEI Rubric in one or more of the following ways. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-down menu

– select all that apply)

No Value

Specify "Other" here:

No Value

Response #8: The following parties will be responsible to ensure the portion of instruction delivered via distance education meetsregular and effective contact. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-downmenu – select all that apply)

No Value

Specify "Other" here:

No Value

Response #9: The College has identified the instructor as prepared to teach in a distance, education delivery method consistent withlocal district policies and negotiated agreements in the following ways. Faculty Selection and Workload as defined by Title 5 Section55208. (Possible Responses in the pull-down menu – select all that apply)

No Value

Specify "Other" here:

No Value

Response #10: Explain the process the department faculty used to determine this course was a good fit for online delivery. FacultySelection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu – select all that apply)

No Value

Specify "Other" here:

No Value

Response #11: The Dean of the discipline supports this course as a good fit for online delivery. Faculty Selection and Workload asdefined by Title 5 Section 55208. (Possible Responses in the pull-down menu)

No Value

Response #12: Complete this section only for noncredit courses. Total hours of instruction:

No Value

Response #13: Complete this section only for noncredit courses. Total instructor contact hours (regular & effective contact):

Response #14: Complete this section only for noncredit courses. Total of outside-of-class work hours:

CE Addendum

Response #1: Can this course be offered in a Correspondence Education format? Correspondence means that the course content,student work, and student feedback are delivered in a print only format without the aid of technology.

No - provide rationale in comment box and bypass the CE Addendum and continue to the next tab in eLumen

Add comments here:

course requires completing ride along hours on the ambulance

Response #2: Explain how time and/or distance will separate the instructor and students. Definition and Application as defined by Title5 Section 55260.

No Value

Response #3: Explain how the instructor will maintain standards of course quality and achieve course outcomes by distributing therequired number of Carnegie unit hours per week using Correspondence methodologies. Provisions of Title 5 Section 53203/55261

No Value

Specify "Other" here:

No Value

Response #4: Complete questions 4, 5 and 6 for noncredit courses. Total hours of instruction:

No Value

Response #5: Complete questions 4, 5 and 6 for noncredit courses. Total instructor contact hours (regular & effective contact):

No Value

Response #6: Complete questions 4, 5 and 6 for noncredit courses. Total of outside-of-class work hours:

No Value

Response #7: Explain how the instructor will meet The Americans with Disabilities Act (ADA) and The Rehabilitations ACT (508) requirements in designing this course. As per Title 5 Section 55263(b)

No Value

Specify "Other" here:

No Value

Response #8: Explain how this course will meet the same quality standards as its in-person counterpart. Course Quality Standards asdefined by Title 5 Section 55261. This Correspondence course will offer:

No Value

Specify "Other" here:

No Value

Response #9: Explain how the instructor will conduct regular and effective contact between the instructor and students. RegularEffective Contact as defined by Title 5 Section 55262.

No Value

Specify "Other" here:

No Value

Response #10: Explain how the instructor will promote regular and effective contact among students asynchronously. Regular EffectiveContact as defined by Title 5 Section 55262

No Value

Specify "Other" here:

No Value

Response #11: Explain the process the department faculty used to determine this course was a good fit for Correspondence delivery.Faculty Selection and Workload as defined by Title 5 Section 55264

No Value

Specify dates and "other" here:

No Value

Exhibit C

Merced College
Course Outline of Record Report
06/27/2022

FIRE63A : Basic Firefighter I, Academy A

General Information

Author:	• Gabriela Garcia
Course Code (CB01) :	FIRE63A
Course Title (CB02) :	Basic Firefighter I, Academy A
Cohort:	Fire Technology
Proposal Start:	2020U
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	Clearly Occupational
Distance Education Approved:	Yes
Course Control Number (CB00) :	CCC000359196
Curriculum Committee Approval Date:	09/05/2019
Board of Trustees Approval Date:	10/08/2019
External Review Approval Date:	Pending
Course Description:	This course provides manipulative and technical training in basic concepts of fire department organization, miscellaneous equipment and tools, fire behavior and extinguishment theory, fire fighter safety, self-contained breathing apparatus, and portable fire extinguishers. The course also provides training in ropes, knots, hitches, hoses, nozzles, appliances, ground ladders, forcible entry, and confined space rescue. Students must supply instructor-approved personal protective equipment (required instructional material).
Submission Rationale:	No value
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Fire Technology
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Letter Grade Methods
- Pass/No Pass

☐ Allow students to gain Credit for Prior Learning (CPL)

Allowed Number of Retakes

0

Course Prior To College Level (CB21)

No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

☑ Course is part of a program (CB24)

Associated Program	Award Type	Active
Fire Technology (CT)	Certificate of Achievement (16+ units)	2018U

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours: Lecture Units and Hours

Summary

Minimum Credit Units (CB07)	8
Maximum Credit Units (CB06)	8
Total Course In-Class (Contact) Hours	126
Total Course Out-of-Class Hours	252
Total Student Learning Hours	378

Faculty Load 0

Credit / Non-Credit Options

Course Credit Status (CB04)	Course Non Credit Category (CB22)	Non-Credit Characteristic
Credit - Degree Applicable	Credit Course.	No Value

Course Classification Code (CB11)	Funding Agency Category (CB23)	Cooperative Work Experience Education Status (CB10)
Credit Course.	Not Applicable.	

☐ Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	7	14
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	126
Laboratory	0
Activity	0
Total	126

Course Out-of-Class Hours

Lecture	252
Laboratory	0
Activity	0
Total	252

Time Commitment Notes for Students

Most weekends 8-5 and travel time to training grounds at different locations

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours: Lecture Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Units and Hours: TBA Units and Hours

Summary

Minimum Credit Units (CB07) 0

Maximum Credit Units (CB06) 0

Total Course In-Class (Contact) Hours 54

Total Course Out-of-Class Hours 0

Total Student Learning Hours 54

Faculty Load 0

Detail

Weekly Student Hours

	In Class	Out of Classs
Lecture Hours	0	0
Laboratory Hours	3	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	0
Laboratory	54
Activity	0
Total	54

Course Out-of-Class Hours

Lecture	0
Laboratory	0
Activity	0
Total	0

Time Commitment Notes for Students

No Value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours: TBA Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class

No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Prerequisite

FIRE30 - Fire Protection Organization

Outcomes

- Distinguish between the educational requirements, duties, and information sources for various occupations in fire protection.
- Categorize the basic components of a fire as a chemical reaction, the major phases of fire, and the main factors that influence fire spread and fire behavior, and its effects on environment, at a basic level.
- Identify the various types of public and private fire protection equipment and systems and describe the purpose and scope of their activities, at a basic level.
- Examine fire fighting strategy and tactics using the types of common fire department apparatus, equipment, and personal safety equipment, at a basic level.

OR

Prerequisite

Existing Paid Call (Volunteer) Firefighter with signed waiver from a supervising officer of the agency that the candidate possesses the requisite knowledge contained in Fire 30.

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
Physician's clearance for strenuous activity.	No Value

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Rationale	No value
Methods of Instruction	Demonstration

Rationale	No value
Methods of Instruction	Other
Rationale	Other - Video, film and slides
Methods of Instruction	Other
Rationale	Other - Tours

Assignments

READING
1. Text
2. Instructor handouts.

WRITING
1. Complete student information sheets
2. Written assignments on the following:
a. Ropes. knots, and hitches.
b. Hose.
c. Fire protection systems.

OUTSIDE
1. Reading and reviewing class texts and handouts.
2. Skills development

CRITICAL THINKING
1. Analyze the functions and responsibilities of each position on a typical fire department organizational chart
2. Evaluate fire control situations for safety and proper control techniques
3. Describe various fire suppression tools and equipment and their uses.

Methods of Evaluation	Rationale
Class Participation	No value
Other	Other - Manipulation skills testing
Other	Other - Written quizzes
Exams/Tests	No value
Other	Other - Written reports

Equipment

Essentials of Firefighting and Fire Department Operations, workbook, optional

California State Fire Marshal approved workbooks and texts for portions of the program that are certificated modules, and are instructed by state certified instructors

Textbooks

Author	Title	Publisher	Date	ISBN
International Assoc. of Fire Chiefs and NFPA	Fundamentals of Firefighter Skills; Evidence Based Practices	Jones and Bartlett	2017	9781284098211

Other Instructional Materials

Description	Instructor Handouts
Author	No value
Citation	No value

Materials Fee

Varies with required or desired certifications

Learning Outcomes and Objectives

Course Objectives

A. Perform skills and tasks as defined by the professional guidelines of the Firefighter 1 standards of the California State Fire Marshal. All SLO's are covered in this objective.

CSLOs

Analyze a fire or rescue/confined space situation and appropriately apply the proper safety and rescue techniques. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology. Demonstrate an appreciation of lifelong learning.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Develop competency in donning and using an SCBA as well as analyzing conditions to appropriately determine when respiratory protection is needed. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology. Demonstrate an appreciation of lifelong learning.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Describe the need for and apply appropriately knots and hitches with ropes. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Develop competency in lifting, carrying, and throwing ground ladders. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Demonstrate competency in using hoses and nozzles. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Outline

Course Outline

I. Fire service organization and responsibility

- A. Relationships of fire department
  - 1. Relationships of fire department with other local agencies
  - 2. National, federal, and state fire service organizations
  - 3. Community organizations having an interest/relationship to public fire protection
- B. Fire department functions
- C. Fire department plans
- D. Principles of the standardized emergency management system
- E. Fire prevention function
- F. Fire Department service resources
- G. Duties of fire service ranks and positions
  - 1. Fire service agency rules and regulations
  - 2. Discipline in the fire service
  - 3. Fire fighter safety and physical fitness
  - 4. fire service labor organizations
  - 5. Work site health and safety legislation
  - 6. California joint apprenticeship program
  - 7. Sexual harassment recognition and prevention
  - 8. Cultural diversity
  - 9. Training and education programs
- H. California fire service and rescue emergency mutual aid plan

II. Miscellaneous equipment and tools

- A. Hand tools
  - 1. characteristics and functions of fire service hand tools
  - 2. Inspection and maintenance of fire service hand tools
- B. Power tools
  - 1. Characteristics and functions of fire service power tools
  - 2. Inspection and maintenance of fire service power tools
- C. Record management systems for hand and power tools
- D. Characteristics, functions, inspections, and maintenance of
  - 1. Chain saws
  - 2. Rotary (circular) saws
  - 3. Pneumatic air chisels
  - 4. Fire service lighting equipment
  - 5. Fire service headlamps
  - 6. Fire service jacks
  - 7. Thermal imaging devices
- E. How to set up portable lights
- F. How to ignite and extinguish road flares and fuses
- G. Safety concerns for utility interruptions

H. Navigational tools for the fire service

III. Fire behavior and extinguishment theory

A. Building construction
1. Introduction to building construction
2. Building components
3. Purpose of fire resistive ratings for walls and buildings
4. Basic roof construction and safety considerations
5. Indications of potential building collapse

B. Heat energy
1. Types of heat measurement
2. Sources of heat energy
3. Theory and fundamentals of heat transfer
4. Terms related to the fundamentals of combustion
5. Elements of the combustion process
6. Products of combustion
7. Physical properties of common combustion gases

C. Phases of fire
1. Characteristics of pyrolysis, rollover, flashover, and backdraft
2. Types and causes of explosions

D. Characteristics and functions of extinguishing agents

E. Properties of water as they relate to fire fighting

IV. Fire fighter safety

A. General safety precautions for all emergency situations

B. Personal protective equipment for the fire service
1. Reasons why personal protective equipment can fail
2. characteristics and functions of personal alarm devices
3. How to don structural PPE within one minute, doff, and prepare for rescue

C. Traffic control considerations for energized electrical equipment

D. Procedures for responding on apparatus

E. Fire fighter injuries and fatalities

F. Procedures for using rapid intervention crews

G. Performing an assessment on a downed fire fighter

H. Personal accountability reports

V. Self-Contained breathing apparatus

A. Conditions requiring respiratory protection

B. Types of self-contained breathing apparatus
1. SCBA components and accessories
2. Factors affecting reduced air supply duration of SCBA
3. Safe use of SCBA
4. Emergency procedures when using SCBA
5. How to don a SCBA
a. Facepiece with a low pressure hose
b. Facepiece with a facepiece-mounted regulator
c. Over-the-head method
d. Sling/coat method
e. From vehicle or wall mount
6. How to remove a SCBA
7. How to pass through a narrow opening while wearing a SCBA
8. How to change a SCBA air cylinder
a. One-person method
b. Two-person method
9. Methods used to fill SCBA cylinders
10. How to fill a SCBA cylinder, cascade method
11. Inspection and maintenance of SCBA
12. Procedures used to clean and sanitize SCBA

VI. Portable fire extinguishers

A. Classification of fire and fire extinguishers

B. Classification marking on portable fire extinguishers

C. Portable fire extinguisher laws and regulations

D. How to operate a portable extinguisher using "PASS" method

E. Safety precautions when using portable fire extinguishers

F. Characteristics and functions of portable fire extinguishers
G. How to operate a gas cartridge portable fire extinguisher
H. How to operate a stored-pressure portable fire extinguisher
I. Inspection and maintenance of portable fire extinguishers
J. How to service a gas cartridge portable fire extinguisher
K. How to service a stored-pressure portable fire extinguisher

VII. Ropes, knots and hitches

A. Characteristics of functions of fire service rope and webbing
1. Inspection and maintenance of fire service rope and webbing
2. Introduction to fire service rescue knots
3. How to tie knots
a. half hitch
b. clove hitch
c. square knot
d. bowline
e. becket bend
f. half sheepshank (trucker's hitch)
g. family of eight knots
h. handcuff knot
i. overhand bend (water knot) with webbing

B. Safety considerations when hoisting or lowering equipment
1. How to tie-off for hoisting
a. a pick-head axe
b. a pike pole
c. a roof ladder
d. a dry hoseline
e. a charged hoseline
2. Methods of storing rope
3. How to make a barrel coil
4. How to load a drop bag

VIII. Hose, nozzles, and appliances

A. Characteristics and functions
1. Fire hose
2. Fire hose couplings
3. Nozzles

B. Inspection and maintenance
1. Fire hose
2. Fire hose couplings
3. Nozzles

C. Characteristics and functions of
1. Fire service Wyes
2. Fire service Siamese
3. Special hose appliances
4. Hose appliances

D. How to make Rolls
1. In-service straight roll
2. Out-of-service straight roll
3. Donut roll, one person method
4. Donut roll, two person method
5. Twin donut roll
6. Self-locking twin donut roll

E. Procedures for inspecting, coupling, and uncoupling hoseline
F. How to couple hoseline
1. One-person, foot-tilt method
2. Two-person method
3. One-person, between-the-feet method
4. One-person, over-the hip method

G. How to uncouple a tight coupling
1. One-person, knee-press method
2. Two-person, stiff-arm method

H. How to attack a nozzle to a hoseline
1. One-person tilt method
2. Two-person Method

I. How to siamese two lines into one
J. How to wye hoselines together
K. Hose clamp
    1. Characteristics and functions
    2. How to operate
L. Characteristics and functions of tools
    1. Spanner wrench
    2. Hose Roller
    3. Hose ramps and bridges
    4, Chafing blocks
M. Basic hose loads and finishes
    1. How to make the accordion load, three-person method
    2. How to make the flat load, two-person method
    3. How to make the horseshoe load, two-person method
    4. Procedures for loading large diameter hose
    5. How to load large diameter hose on a reel
    6. How to flat load large diameter hose, three-person method
N. Types of supply line hose lays
O. How to make a hydrant connection
P. Carries
    1. How to perform a horseshoe shoulder carry
    2. How to perform an accordion shoulder carry
    3. How to load and carry a working line
    4. How to perform the drain and carry
    5. How to advance the nozzle end of a hoseline
    6. How to advance an uncharged 2 Y, " hose with attached nozzle
    7. How to advance a charged hoseline into structure, two-person
    8. How to advance a 2)1," hoseline up a stairway, three person
    9. How to advance a 2)1," hoseline up an exterior stairway, using pike pole three-four person
    10. How to advance a 2)1," hoseline down a stairway
    11. How to connect a 2)1," hoseline to an upper floor standpipe and advance the line, two-person method
    12. How to advance an uncharged 2)1," hoseline up an extension ladder and into a window, three-person method
    13. How to advance a charged 2)1," hoseline up an extension ladder and into a window, four-person method
    14. How to extend a charged 2)1,' hoseline
    15. How to reduce a hoseline
    16. Procedures for retrieving a loose hoseline
    17. How to replace a section of hose in a charged 2)1," hoseline
Q. Selection and use of fire streams
    1. How to use a booster line
    2. How to operate a medium-size attack line, two person
    3. How to operate a large-size attack line, one person
    4. How to operate a large-size attack line, two person
    5. How to operate a large-size attack line, three person
    6. How to operate a large-size attack line, three person method
    7. How to operate a charged 2 Yon hoseline from a ladder
R. Characteristics and functions of master stream appliances
    1. How to deploy a portable monitor unit
    2. Characteristics and functions of foam producing devices
    3. Inspection and maintenance of foam producing devices

IX. Ground ladders

A. Types of ladders employed by the fire service
    1. Characteristics and functions of fire service ground ladders
    2. Ladder design and construction
    3. Selection methods for the proper size ladder for different situations
    4. Ladder safety practices
    5. Methods of improvising with ground ladders
    6. Inspection and maintenance of fire service ground ladders
    7. Ladder movement
        a. how to remove ladders from apparatus, one-person
        b. how to remove ladders from apparatus, two-person
        c. how to lift and lower a ladder, from the ground, one-person
        d. how to carry a ladder, one-person, high-shoulder method
    8. carrying ladders
        a. one-person, high-shoulder method

b. a straight ladder, one-person, arm's length method
c. one-person, low-shoulder method
d. extension ladder, two or three-person, arm's length-on-edge method
e. three-person, flat-shoulder method
f. extension ladder, three-person, flat-arm's length method
g. extension ladder, four to six-person, flat-shoulder method
h. four to six-person, flat arm's length method
i. through a narrow passageway from flat-shoulder carry

9. How to extend an extension-type A-frame combination ladder, one person method
10. How to raise and ladders
    a. a folding (attic) ladder, one-person method
    b. a combination A-frame ladder, one person method
    c. a straight or roof ladder
    d. and extend an extension ladder, one-person high-shoulder method
    e. a straight or extension ladder, two-person, beam method
    f. a straight or extension ladder, two-person, flat-raise method
    g. extend, and lower an extension ladder, three-person, flat-raise method
    h. an extension ladder, four-person, flat-raise method
11. How to deploy a roof ladder, one-person method
12. How to deploy a roof ladder, two-person method
13. How to tie a ladder halyard
14. How to pivot a free-standing straight or extension ladder, one-person method
15. How to pivot a free-standing straight or extension ladder, two-person method
16. How to heel/foot a ladder
17. How to adjust a ladder's climbing angle, one-person method
18. How to climb a ladder
19. How to carry a pike pole up a ladder
20. How to carry a hand tool up a ladder
21. How to tie a ladder in
22. How to work on a ladder, leg-lock method
23. How to dismount a ladder into a window
24. How to dismount a ladder onto a roof
25. How to raise a pole ladder, four-person, flat-raise method
26. How to raise a pole ladder, five to six-person, flat-raise method

X. Forcible Entry

A. Principles of breaking or pulling locks
B. Principles of forcing single-entry doors
C. Principles of overhead doors
D. Principles of opening walls
E. Principles of opening partitions
F. Principles of opening ceilings with a pike pole
G. Principles of opening floors
H. How to force open and remove security bars
I. How to force open and remove security screen
J. Operating principles for various window styles
K. Principles of breaking window glass
L. How to force open a double-hung/checkrail window
M. How to force open a casement (kinged) window
N. How to force open a awning or jalousie louvered window
O. How to force open a projected (factory) window
P. How to force open a Lexan Window
Q. Dangers of forcing entry through doors, windows, and walls

XII. Confined space entry and rescue operations

A. Compliance with California regulations
B. Compliance with federal regulations
C. Confined space hazards
    1. Oxygen-deficient atmosphere
    2. Toxic and/or hazardous vapors
D. Atmospheric monitoring
    1. Sample atmosphere
    2. Confirmed it as tenable
    3. Identify hazards
    4. Air blower and flexible duct

5. Individual monitors
E. Hazard control
F. Personal protective equipment
1. Protective clothing
a. For known hazards
b. For possible hazards
2. Lifelines for each member
3. Radio
4. Fully equipped and dressed out backup crew
G. Confined space rescue
1. Size up (assessing the incident)
2. Identify on-scene or available experts
3. Stabilize entrapping machinery
4. Access the patient
5. Disentangle the patient
6. Remove the patient
H. Rescue equipment, knots and systems

XI. Rescue

A. Components of rescue operations
B. Safety considerations during a rescue search in a burning building
C. Search and rescue procedures in a burning, smoke-filled building
D. Characteristics of primary and secondary searches in a structure
E. How to lift and carry a victim
1. One-person method
2. Cradle-in-the -arms method
3. Two-person, chair method
4. Two-person, seat-carry method
5. Two-person, extremities method
6. Three-person method
F. How to drag a victim, turnout coat or blanket drag method
G. How to construct an improvised stretcher
H. Why stairways are preferred over ladders for rescue
I. How to assist a conscious victim down a ladder, two-person method
J. How to move an unconscious victim down a ladder, two-person method
K. How to use a ladder for ground level rescue, three-person method
L. How to tie and attach the rescue chest harness
M. How to wrap a victim before securing in a rescue litter
N. USAR incident command system
O. Basic, light, medium, and heavy operational levels for USAR teams
P. Search marking systems used by USAR teams
Q. Structure and hazard markings used by USAR teams
R. Supporting USAR teams during deployment

Lab Outline

Lab content is embedded into and contains the same course content as lecture.

DE Addendum Revisions

Response #1: Explain how time and/or distance will separate the instructor and students. Definition and Application as defined by Title 5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

- face-to-face lab and online lecture and activities – hybrid

Specify "Other" here:

No Value

Response #2: Explain how the instructor will distribute the required number of unit hours per week using technology. Definition and Application as defined by Title 5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

- lecture video
- discussion board activities
- quiz activities
- content via Google Slide / PowerPoint presentations
- supplemental instructional video, such as YouTube, TedTalks, and PBS

Specify "Other" here:

No Value

Response #3: Explain how the instructor will meet ADA requirements in designing this course. Course Quality Standards as defined by Title 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply)

- work with the College Instructional Designer
- work with the College ADA specialist
- work with the local POCR Team
- receive a 'Badge' from the CVC-OEI Design Academy
- utilize a 'Blueprint' course

Response #4: Explain how the instructor's course will meet the same quality standards as an in-person counterpart. Course Quality Standards as defined by Title 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply) • The online course will offer:

- weekly lectures
- discussion opportunities between students weekly
- student-to-student activities such as group work
- regular assessment: both formative and summative
- regular feedback weekly
- re-teaching opportunities

Specify "Other" for Response #3 here:

No Value

Specify "Other" for Response #4 here:

No Value

Response #5: Explain how the instructor will conduct regular and effective contact between the instructor and students. Please include the time frame parameters. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – select all that apply)

- pre-class 'Welcome Letter'
- weekly lectures
- weekly announcement using the LMS (Canvas)
- online orientation – non-mandatory
- timely feedback within the LMS (Canvas) – within 72-hours of the due date
- gradebook alerts – weekly
- midterm and end-of-course surveys
- College email – respond within 24-hours M-F
- LMS (Canvas) email – respond within 24-hours M-F
- office phone – respond within 24-hours M-F
- periodic online review/study sessions – non-mandatory

- periodic online workshops – non-mandatory

Specify "Other" here:

No Value

Response #6: Explain how the instructor will promote regular and effective contact among students either synchronously or asynchronously. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – select all that apply)

- weekly discussion boards – robust posts and replies
- group work, peer review, small group discussion boards, other (specify in comment box)
- LMC (Canvas) email

Specify "Other" here:

No Value

Response #7: This course will strive to meet the quality standards for alignment at 100% as set forth in the CVC-OEI Rubric in one or more of the following ways. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-down menu – select all that apply)

- The instructor has conducted a self-assessment of the CVC-OEI Rubric.
- The instructor's course has been 'Badged' by the CVC-OEI Design Academy.
- The instructor will be using a 'Blueprint' course created by Merced College.

Specify "Other" here:

No Value

Response #8: The following parties will be responsible to ensure the portion of instruction delivered via distance education meets regular and effective contact. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-down menu – select all that apply)

- Dean of the Cohort/Department
- Faculty teaching the course

Specify "Other" here:

No Value

Response #9: The College has identified the instructor as prepared to teach in a distance, education delivery method consistent with local district policies and negotiated agreements in the following ways. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu – select all that apply)

- other (specify in comment box)

Specify "Other" here:

Not completed yet

Response #10: Explain the process the department faculty used to determine this course was a good fit for online delivery. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu – select all that apply)

- other (specify in the comment box)

Specify "Other" here:

Not recommended but can be hybrid in an 'emergency'

Response #11: The Dean of the discipline supports this course as a good fit for online delivery. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu)

- Yes

Exhibit D

Merced College
Course Outline of Record Report
06/27/2022

FIRE63B : Basic Firefighter I, Academy B

General Information

Author:	• Gabriela Garcia
Course Code (CB01) :	FIRE63B
Course Title (CB02) :	Basic Firefighter I, Academy B
Cohort:	Fire Technology
Proposal Start:	2020U
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	Clearly Occupational

Distance Education Approved: Yes

Course Control Number (CB00) :CCC000380830

Curriculum Committee Approval Date:09/05/2019

Board of Trustees Approval Date:10/08/2019

External Review Approval Date: Pending

Course Description:	This course provides manipulative and technical training in basic concepts of ventilation, fire control, salvage and overhaul operations, fire protection water systems, fire protection systems, fire prevention and investigation, communications, vehicle extrication, wildland fire fighting, urban interface, and hazardous materials.
Submission Rationale:	No value
Author:	No value

Faculty Requirements

Master Discipline Preferred: • Fire Technology

Alternate Master Discipline Preferred: No value

Bachelors or Associates Discipline Preferred: No value

Additional Bachelors or Associates Discipline Preferred: No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

☐ Allow students to gain Credit for Prior Learning (CPL)

Course Special Class Status (CB13)

Course is not a special class.

Allowed Number of Retakes

0

Grade Options

• Letter Grade Methods

Course Prior To College Level (CB21)

No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

Course is not a support course

Associated Programs

☒ Course is part of a program (CB24)

Associated Program	Award Type	Active
Fire Technology (CT)	Certificate of Achievement (16+ units)	2018U

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

Not Applicable

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours: Lecture Units and Hours

Summary

Minimum Credit Units (CB07) 8

Maximum Credit Units (CB06) 8

Total Course In-Class (Contact) Hours 126

Total Course Out-of-Class Hours 252

Total Student Learning Hours 378

Faculty Load 0

Credit / Non-Credit Options

Course Credit Status (CB04)	Course Non Credit Category (CB22)	Non-Credit Characteristic
Credit - Degree Applicable	Credit Course.	No Value

Course Classification Code (CB11)
Credit Course.

Funding Agency Category (CB23)
Not Applicable.

Cooperative Work Experience Education Status (CB10)

☐ Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	7	14
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	126
Laboratory	0
Activity	0
Total	126

Course Out-of-Class Hours

Lecture	252
Laboratory	0
Activity	0
Total	252

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours: Lecture Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Units and Hours: TBA Units and Hours

Summary

Minimum Credit Units (CB07) 0

Maximum Credit Units (CB06) 0

Total Course In-Class (Contact) Hours 54

Total Course Out-of-Class Hours 0

Total Student Learning Hours 54

Faculty Load 0

Detail

Weekly Student Hours

	In Class	Out of Classs
Lecture Hours	0	0
Laboratory Hours	3	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	0
Laboratory	54
Activity	0
Total	54

Course Out-of-Class Hours

Lecture	0
Laboratory	0
Activity	0
Total	0

Time Commitment Notes for Students

No Value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours: TBA Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85A - Foundations in Academic Literacy I

- A. Use the reading process, at the pre-transfer level, to access a variety of texts.
- A1. Make connections between course readings and prior knowledge.
- A4. Annotate a variety of texts to identify thesis, primary support, and other rhetorical features.
- A5. Identify authors' claims and primary and secondary support.
- C. Apply, at the pre-transfer level, critical thinking strategies of summary, analysis, evaluation, and synthesis to engage with the ideas of texts.
- C1. Summarize a variety of academic texts to make inferences and draw conclusions.

Outcomes

- Use the reading process, at the pre-transfer level, to access a variety of texts.
- Evaluate, at the pre-transfer level, primary and secondary sources.
- Apply, at the pre-transfer level, critical thinking strategies, such as summary, analysis, evaluation, and synthesis, to engage in both the reading and writing process.

AND

Prerequisite

FIRE63A - Basic Firefighter I, Academy A

Objectives

- A. Perform skills and tasks as defined by the professional guidelines of the Firefighter 1 standards of the California State Fire Marshal. All SLO's are covered in this objective.

Outcomes

- Analyze a fire or rescue/confined space situation and appropriately apply the proper safety and rescue techniques.
- Develop competency in donning and using an SCBA as well as analyzing conditions to appropriately determine when respiratory protection is needed.
- Describe the need for and apply appropriately knots and hitches with ropes.
- Develop competency in lifting, carrying, and throwing ground ladders.
- Demonstrate competency in using hoses and nozzles.

AND

Advisory

ENGL85AC - Accelerated Foundations in Academic Literacy

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description

Physician's clearance for strenuous activity.No Value

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Rationale	No value
Methods of Instruction	Demonstration
Rationale	No value
Methods of Instruction	Other
Rationale	Other - Video, film and slides

Assignments

READING
1. Text

WRITING
1. Draft a letter of application resume
2. Compete an application package for a fire department within the Merced College district

OUTSIDE
1. Reading and reviewing class texts
2. Skills development with various tools and appliances
3. Skills development with breathing apparatus

CRITICAL THINKING
1. Analyze assigned tasks and select the use of proper tools and equipment to accomplish those tasks;
2. Demonstrate the ability to select the proper methods to protect the contents of a fire building and apply the methods to various simulated or real situations;
3. Analyze a simulated fire scene and apply the seven steps of size-up in their proper sequence.

Methods of Evaluation	Rationale
Class Participation	No value
Other	Other - Manipulation skills testing (student demonstration)
Other	Other - Written quizzes
Exams/Tests	No value

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN

International Fire Service Training Association	Essentials of Fire Fighting and Fire Department Operations	-Brady	2013	
International Association of Fire Chiefs; National Fire Protection Association	Fundamentals of Fire Fighter Skills	Jones and Bartlett	2017	9781284098211

Other Instructional Materials

No Value

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

A. Perform skills and relate knowledge equivalent to the requirements for Firefighter I certification as determined by the California State Fire Marshal. This objective covers all SLO's.

CSLOs

Evaluate the emergency for safety needs and hypothetically apply appropriate methods of fire attack to fire scenarios involving various classification of fires Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
	Demonstrate the ability to evaluate and adhere to ethics and compassionate treatment of patients and victims.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Analyze in order to apply appropriate vehicle extrication methods to the need for extricating victims from entrapment Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
	Demonstrate the ability to evaluate and adhere to ethics and compassionate treatment of patients and victims.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Recognize hazardous materials situations and determine safety, isolation, and notification needs in an emergency hazardous materials scene; Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
	Demonstrate the ability to evaluate and adhere to ethics and compassionate treatment of patients and victims.

ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Demonstrate competency in the provision of medical care at the level of State Fire Marshal First Responder, Medical. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology. Demonstrate the ability to evaluate and adhere to ethics and compassionate treatment of patients and victims.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information Global & Community Consciousness and Responsibility - Demonstrate an understanding of different cultures and knowledge of historical eras and the important of community involvement

Outline

Course Outline

I. Ventilation

A. Safety considerations during ventilation operations
B. Fireground use of forced ventilation equipment
C. Horizontal ventilation principles and procedures
D. Consequences of improper horizontal ventilation
E. How to perform hydraulic ventilation with a fog nozzle
F. Considerations given vertical ventilation openings
G. Principles and procedures for ventilating various roof designs
H. Principles and procedures for vertical ventilation
I. Consequences of improper vertical ventilation
J. Using existing roof openings for vertical ventilation
K. Principles of strip ventilation
L. Principles of positive pressure ventilation
M. How to
    1. Operated a positive pressure ventilation
    2. Use a smoke ejector to force ventilation through a horizontal opening
    3. Hang a smoke ejector outside a window using a ladder
    4. Hang a smoke ejector in a hall or archway
    5. Hang a smoke ejector in an A-frame
    6. Hang a smoke ejector in a door or window casing
    7. Hang a smoke ejector on a ladder in a stairway
    8. Hang a smoke ejector from the top of a door
N. Using flexible duct attachment for ventilation
O. Built-in ventilation devices
P. Controlling the spread of smoke and fire through duct systems
Q. Below-grade ventilation

II. Fire Control

A. Principles underlying the various modes of fire attack
B Types of fire streams and point of application for Class A fires
C. Basic Guidelines for initial attack
D. Why water extinguishes Class A fires
E. Safety precautions when using water to extinguish a fire
F. Safety precautions when handling hoseline
G. How to safely attack an interior or exterior Class A fire
H. Methods used to protect exposures
I. How to protect exposures
J. Basic considerations for vehicle fires
K. Safety precautions for vehicle fires
L. Accessing passenger vehicle compartments during a fire
M. Physical properties of combustible and flammable liquids and gases

N. Extinguishing Class B fires
O. How to control a flammable liquid gas cylinder fire while operating as a member of a crew

III. Salvage and overhaul
A. Purpose and value of salvage operations
B. Safety considerations during salvage and overhaul operations
C. Considerations for atmospheric monitoring
D. Commonly performed overhaul procedures and their purpose
E. Characteristics and functions of fire service salvage equipment
F. Procedures for detecting hidden fires
G. Principles and procedures for using an infrared scanner
H. Procedures for extinguishing hidden fires
I. Providing protection during chimney fires
J. Inspection and maintenance of fire service salvage covers
K. Procedures for making buildings and areas safe after an emergency
L. Arranging building contents for covering
M. Using salvage covers to cover shelves
N. Protecting floors and walls using salvage covers
O. Procedures for constructing a smoke curtain
P. How to
1. Roll a salvage cover for a one-person throw
2. Fold a salvage cover for a one-person throw
3. Perform the accordion foid
4. Spread a rolled salvage cover
5. Spread a folded salvage cover
6. Spread an accordion folded salvage cover
7. Spread a salvage cover with a balloon throw, two person method
8. Spread a salvage cover using the single-edge snap throw, two person method
9. Spread an accordion folded salvage cover using the two-person counter payoff method
10. Remove a salvage cover
11. Splice salvage covers, two-person method
Q. Principles and procedures for using and constructing water chutes and dikes
1. How to make a water chute with pike poles, two-person method
2. Using hoselines to move, contain, or divert water
3. considerations for constructing a stairway drain
4. How to make a stairway drain
5. Using building drains and scuppers
6. Characteristics and functions of catchalls, catch basins, sumps, and dikes
7. How to make a catchall, two-person method
8. How to make a catch basin
9. How to make a sump
10. How to make a dike
11. Characteristics and functions of water removal devices
12. How to use a squeegee
13. Characteristics and functions of industrial water vacuums
14. How to use a carryall to remove debris
15. Principles and procedures for restoring premises
16. Principles and procedures for covering roof openings

IV. Fire protection water systems
A. Principal features of water systems
B. Factors affecting fire hydrant usability
C. Sources of water supply other than hydrants
D. Characteristics of portable water tanks
E. How to use a public water system's hydrant gate valve
F. How to open and close a fire hydrant valve
G. NFPA hydrant color-coding system
H. Characteristics of wet and dry-barrel hydrants
I. Inspection and maintenance of fire hydrants
J. How to connect a hard suction hoseline for drafting

V. Fire protection systems
A. Components of an automatic sprinkler system
B. Capabilities and limitations of sprinkler systems
C. Characteristics and functions of

1. Wet-pipe sprinkler systems
2. Dry-pipe and pre-action sprinkler systems
3. Deluge sprinkler systems
4. Residential sprinkler systems
5. Standpipe systems

D. Fire service support activities and safety measures for fire protection systems
E. How to
1. Replace an automatic sprinkler system head
2. Operate a sprinkler system's control valves
3. Connect a hoseline to support wet and dry standpipes
4. Connect a hoseline to support a sprinkler system
F. Automatic systems
1. Principles of automatic dry chemical systems
2. Principles of automatic wet chemical systems
3. Principles of Halon systems
4. Characteristics and functions of clean agent and Halon replacement systems
5. Characteristics and functions of automatic foam systems
6. Characteristics and functions of automatic carbon dioxide systems
7. Characteristics and functions of ultra high-speed explosion detection systems
8. characteristics and functions of water mist systems
9. Characteristics and functions of automatic alarm initiating devices
10. Installation practices for residential smoke detectors

VI. Fire prevention and investigation

A. Basic techniques for public education
B. Role of the first responder in fire investigations

VII. Communications

A. Fire department emergency communications systems
B. Characteristics and functions of a fire department radio
C. How to operate a fire department radio
D. Clear radio text and common terminology
E. Methods of receiving fire alarms
F. Telephone and communication procedures
G. Characteristics and functions of traffic pre-emption devices

VIII. Vehicle Extrication

A. Introduction to the principles of vehicle extrication
B. Vehicle anatomy
C. New vehicle safety systems
D. Vehicle accident size-up
E. Principles of victim disentaglement
F. How to stabilize
1. A vehicle one its wheels
2. A vehicle on its side
3. A vehicle on its roof
G. How to remove
1. an adhesive mounted vehicle windshield, two-person method
2. a channel mounted vehicle windshield, two-person method
H. How to open a vehicle roof using an air chisel
I. Characteristics and functions of light rescue hand tools
J. How to displace
1. Vehicle seats using a come-along and chains
2. A steering wheel/column using a come-along
K. How to open a vehicle door using panel cutters and a pry bar
L. Characteristics and function of hydraulic rescue tools
M. Inspection and maintenance of hydraulic rescue tools
N. How to remove a vehicle roof using powered hydraulic shears
O. How to displace a vehicle
1. Seat using a hydraulic jack and ram extension
2. Seat using a powered hydraulic tool
3. Front door using a powered hydraulic tool
P. How to displace a steering wheel/column using a powered hydraulic tool and chains
Q. Characteristics and functions of air bags as a rescue tool
R. Considerations for preparing, packaging, and removing a victim from a vehicle

IX. Wildland fire fighting

- A. Wildland fire behavior
- B. Fire weather
- C. Wildland fire fighter preparedness and personal protective equipment
  - 1. Wildland fire fighting safety
  - 2. Lookouts, communications, escape routes, and safety zones (LCES)
  - 3. Safety considerations when working around dozers
  - 4. Safety considerations when working near aircraft
  - 5. Characteristics and functions of fire shelters
    - a. how to deploy a fire shelter, standing method
    - b. how to deploy a fire shelter, lying-down method
- D. Parts of a wildland fire
- E. Wildland fire strategy
- F. Handline construction
  - 1. Characteristics and functions of wildland hand tools
  - 2. Inspection and maintenance of wildland hand tools
  - 3. Characteristics and functions of back pumps
  - 4. Characteristics and functions of fusees as a firing tool
  - 5. Characteristics and functions of a drip torch
  - 6. How to use a drip torch
  - 7. Characteristics and functions of wildland hose lays
- G. Using water on wildland fires
- H. How to construct progressive hose lays
- I. Characteristics and functions of mobile attack operations
- J. How to perform a mobile attack
- K. Characteristics and functions of mop-up and patrol
- L. Methods for scouting and communicating spot fires
- M. Using a wildland map
- N. Using a wildland compass
- O. Introduction to incident base
- P. Working with wildland fire resources
- Q. Introduction to I-zone
  - 1. I-zone safety considerations
  - 2. I-zone structure protection procedures

X. Introduction to the Incident Command System

- A. National Inter-Agency Incident Management Systems
- B. National Inter-Agency Fire Qualification Systems
- C. Incident Command Systems
- D. Components of Incident Command Systems
  - 1. Common Terminology
  - 2. Modular Organization
  - 3. Integrated Communications
  - 4. Unified Command Structure
  - 5. Consolidated Action Plan
  - 6. Manageable span-of-Control
  - 7. Predesignated Incident Facilities
  - 8. Comprehensive Resource Management
- E. Organization and Operations
  - 1. Command
  - 2. Organization of Incident Tactical Operations
  - 3. Operations Section
  - 4. Planning Section
  - 5. Logistics Section
  - 6. Finance Section
- F. Complex Incidents
  - 1. Extending the Incident Command System Organization
  - 2. Dividing an Incident
  - 3. Final Considerations
- G. Principals and Features of ICS
  - 1. Five Primary Functions
  - 2. Management
    - a. Management by Objectives
    - b. Unity and Chain of Command

c. Transfer of Command
d. Organizational Flexibility
e. Unified Command
f. Span of Control
3. Common Terminology
4. Personnel Accountability
5. Integrated Communications
6. Resources Management
7. Incident Action Plan

H. Organizational Overview
1. Terminology
2. Organizational Structure
3. How the Organization Expands and/or Contracts
a. How the Organization Initially Develops at an Incident
b. Transfer of Command

I. Incident Facilities
1. Command Post
2. Staging Area
3. Base
4. Camps
5. Helibase
6. Helispots

J. Incident Resources
1. Resources Often Used
2. Why Resource Status Keeping is Important to Effective Incident Operations
3. Types of Resources for Various Applications
4. Three Ways of Using Resources on an Incident
5. Resources Status Conditions
6. Changing and Maintaining status on Resources

K. Common Responsibilities Associated with ICS Assignments
1. Prior to Leaving for Assignment
2. At Incident Check-In
3. While Working on the Incident

L. During Demobilization
1. Organization and Staffing
2. Responsibilities of organizational elements in each section of the ICS
3. General duties of each organizational elements
a. Terminology
b. Staffing considerations
c. reporting relationships

M. Organizing for Incidents or Events
1. Manner in which incidents and events are organized to ensure achieving objectives
2. Steps in organizational development
3. Incident briefing
4. Reporting information and forms

N. Resource management process at an incident
1. Resource management
2. Responsibilities related to resource ordering
3. Use of Operational Planning Worksheet
4. Importance of Staging Areas
5. Demobilization of Resources
6. Cost-effective resource management

O. Air Operations Branch
1. Description
2. How to Set Up Effective Aviation Organization
3. Incident and Event Planning
4. Planning Process
5. Development of Incident Objectives, Strategies and Tactics
6. Use of Operational Periods
7. Planning Meetings
8. Major Steps and Personnel Involved in Planning
9. Support Plans
a. Communications
b. Medical
c. Traffic

d. Incident Action Plan Forms

XI. Confined space entry and rescue operations
- A. Compliance with California regulations
- B. Compliance with federal regulations
- C. Confined space hazards
  - 1. Oxygen-deficient atmosphere
  - 2. Toxic and/or hazardous vapors
- D. Atmospheric monitoring
  - 1. Sample atmosphere
  - 2. Confirmed it as tenable
  - 3. Identify hazards
  - 4. Air blower and flexible duct
  - 5. Individual monitors
- E. Hazard control
- F. Personal protective equipment
  - 1. Protective clothing
    - a. For known hazards
    - b. For possible hazards
  - 2. Lifelines for each member
  - 3. Radio
  - 4. Fully equipped and dressed out backup crew
- G. Confined space rescue
  - 1. Size Up (assessing the incident)
  - 2. Identify on-scene or available experts
  - 3. Stabilize entrapping machinery
  - 4. Access the patient
  - 5. Disentangle the patient
  - 6. Remove the patient
- H. Rescue equipment, knots and systems

XII. Hazardous materials
- A. Introduction to hazardous materials
- B. Hazardous materials recognition and safety
  - 1. Compounds
  - 2. Physical and chemical change
  - 3. Exothermic and endothermic reactions
  - 4. Basic gas law
  - 5. Explosives
  - 6. Gases
  - 7. Flammable liquids
  - 8. Flammable solids
  - 9. Oxidizers and organic peroxides
  - 10. Poisons
  - 11. Pesticides and carcinogens
  - 12. Radioactives
  - 13. Corrosives
- C. Safety, isolation and notifications
- D. Command introduction to scene management
- E. IDHA and action plans
- F. Protective equipment and first responder limitations
- G. Respiratory protection fundamentals
- H. Contamination protection
- I. Containment
- J. Decon; disposal and documentation
- K. Agency coordination
- L. Pre-event and event specific planning
- M. Toxicology
- N. Safe and competent haz mat response

XIII. Wildland fire urban interface
- A. Assessment introduction
  - 1. Pre-incident size-up (assessment)
  - 2. At the scene size-up
  - 3. Size-up report

4. Resource size-up

B. Initial strategy and action plan
1. Action plan development
2. Resource needs
3. Briefing and deployment
4. Unified command

C. Structure triage
1. Decision process
2. Five factors that affect your triage decision
3. Consider all the factors
4. When it is hopeless
5. Closing comment

D. Tactics
1. Initial operations
2. Structure and site preparations
3. Engine operations
4. Hand crews
5. Firing operations
6. Aircraft operations
7. Heavy equipment operations
8. Review unit objectives

E. Action plan assessment
1. Assessing action plan effectiveness
2. Updating the action plan
3. Safety

F. Public relations and follow-up
1. Follow-up
2. Public relations
3. Post incident management
4. Agency policies
5. Mutual aid situations

G. Safety
1. General safety considerations
2. Interface safety considerations

XIV. Medical Care

A. CPR
B. Vital Signs, Diagnostics,
C. Anatomy and Physiology
D. Airway Management
E. Patient Assessment
F. Patient Movement
G. Scene Size-up
H. Medical Emergencies
I. Trauma Emergencies
J. Child and Elder Assessment
K. Muscular/Skeletal Emergencies
L. Splinting
M. Pharmocology
N. Respiratory
O. Cardiac Emergencies
P. Diabetic Emergencies
Q. Environmental Emergencies
R. Allergies, Poisonings, Overdose
S. Behavioral Emergencies
T. Bleeding and Shock
U. Soft Tissue Injuries
V. Obstetric Emergencies and Childbirth, S.I.D.S
W. Bloodborne Pathogens
X. MCI, Triage

Lab Outline

1. Ventilation practices

Fire Control Operations
Salvage and overhaul
Fire Protection Systems
Investigation practices
Vehicle Extrication
Wildland Operations
Confined Space Rescue operations
Hazardous Materials operations
Medical care practices

DE Addendum Revisions

Response #1: Explain how time and/or distance will separate the instructor and students. Definition and Application as defined by Title 5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

- face-to-face lab and online lecture and activities – hybrid

Specify "Other" here:

No Value

Response #2: Explain how the instructor will distribute the required number of unit hours per week using technology. Definition and Application as defined by Title 5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

- lecture video
- discussion board activities
- quiz activities
- content via Google Slide / PowerPoint presentations
- supplemental instructional video, such as YouTube, TedTalks, and PBS

Specify "Other" here:

No Value

Response #3: Explain how the instructor will meet ADA requirements in designing this course. Course Quality Standards as defined by Title 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply)

- work with the College Instructional Designer
- work with the College ADA specialist
- work with the local POCR Team
- receive a 'Badge' from the CVC-OEI Design Academy
- utilize a 'Blueprint' course

Response #4: Explain how the instructor's course will meet the same quality standards as an in-person counterpart. Course Quality Standards as defined by Title 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply) • The online course will offer:

- weekly lectures
- discussion opportunities between students weekly
- student-to-student activities such as group work
- regular assessment: both formative and summative
- regular feedback weekly
- re-teaching opportunities

Specify "Other" for Response #3 here:

No Value

Specify "Other" for Response #4 here:

No Value

Response #5: Explain how the instructor will conduct regular and effective contact between the instructor and students. Please include the time frame parameters. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – select all that apply)

- pre-class 'Welcome Letter'
- weekly lectures
- weekly announcement using the LMS (Canvas)
- online orientation – non-mandatory
- timely feedback within the LMS (Canvas) – within 72-hours of the due date
- gradebook alerts – weekly
- midterm and end-of-course surveys
- College email – respond within 24-hours M-F
- LMS (Canvas) email – respond within 24-hours M-F
- office phone – respond within 24-hours M-F
- periodic online review/study sessions – non-mandatory
- periodic online workshops – non-mandatory

Specify "Other" here:

No Value

Response #6: Explain how the instructor will promote regular and effective contact among students either synchronously or asynchronously. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – select all that apply)

- weekly discussion boards – robust posts and replies
- group work, peer review, small group discussion boards, other (specify in comment box)
- LMC (Canvas) email

Specify "Other" here:

No Value

Response #7: This course will strive to meet the quality standards for alignment at 100% as set forth in the CVC-OEI Rubric in one or more of the following ways. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-down menu – select all that apply)

- The instructor has conducted a self-assessment of the CVC-OEI Rubric.
- The instructor's course has been 'Badged' by the CVC-OEI Design Academy.
- The instructor will be using a 'Blueprint' course created by Merced College.

Specify "Other" here:

No Value

Response #8: The following parties will be responsible to ensure the portion of instruction delivered via distance education meets regular and effective contact. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-down

menu – select all that apply)

- Dean of the Cohort/Department
- Faculty teaching the course

Specify "Other" here:

No Value

Response #9: The College has identified the instructor as prepared to teach in a distance, education delivery method consistent with local district policies and negotiated agreements in the following ways. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu – select all that apply)

- other (specify in comment box)

Specify "Other" here:

Not completed yet

Response #10: Explain the process the department faculty used to determine this course was a good fit for online delivery. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu – select all that apply)

- other (specify in the comment box)

Specify "Other" here:

Not recommended but can be hybrid in an 'emergency'

Response #11: The Dean of the discipline supports this course as a good fit for online delivery. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu)

- Yes

Exhibit E

Merced College
Course Outline of Record Report
06/28/2022

FIRE65C : Wildland Firefighting Strategy & Tactics

General Information

Author:	• Bryan Donnelly
Course Code (CB01) :	FIRE65C
Course Title (CB02) :	Wildland Firefighting Strategy & Tactics
Cohort:	Fire Technology
Proposal Start:	2020U
TOP Code (CB03) :	(2133.10) Wildland Fire Technology
CIP Code:	(43.0206) Wildland/Forest Firefighting and Investigation
SAM Code (CB09) :	Clearly Occupational
Distance Education Approved:	No
Course Control Number (CB00) :	CCC000362001
Curriculum Committee Approval Date:	09/05/2019
Board of Trustees Approval Date:	10/08/2019
External Review Approval Date:	Pending
Course Description:	This course stresses the fundamentals of initial-attack wildland firefighting and how to apply wildland firefighting strategy and tactics during the suppression effort which also includes live fire control. Must have instructor approved fire protective gear.
Submission Rationale:	Mandatory Revision 6 yr. CTE review
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Fire Technology
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)
Course is not a basic skills course.

Course Special Class Status (CB13)
Course is not a special class.

Grade Options
• Letter Grade Methods

☐ Allow students to gain Credit for Prior Learning (CPL)

Allowed Number of Retakes
0

Course Prior To College Level (CB21)
No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

☐ Course is part of a program (CB24)

Associated Program	Award Type	Active
No value	No value	

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07)	1
Maximum Credit Units (CB06)	1
Total Course In-Class (Contact) Hours	18
Total Course Out-of-Class Hours	36
Total Student Learning Hours	54
Faculty Load	0

Credit / Non-Credit Options

Course Credit Status (CB04)

Credit - Degree Applicable

Course Non Credit Category (CB22)

Credit Course.

Non-Credit Characteristic

No Value

Course Classification Code (CB11)

Funding Agency Category (CB23)

Cooperative Work Experience Education

Credit Course. Not Applicable. ☐ Status (CB10)

☐ Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	1	2
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	18
Laboratory	0
Activity	0
Total	18

Course Out-of-Class Hours

Lecture	36
Laboratory	0
Activity	0
Total	36

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0 **Faculty Load:** 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85A - Foundations in Academic Litera

- A. Use the reading process, at the pre-transfer level, to access a variety of texts.
- A1. Make connections between course readings and prior knowledge.
- A2. Utilize inferencing when scanning texts to draw conclusions.
- A4. Annotate a variety of texts to identify thesis, primary support, and other rhetorical features.

Outcomes

- Use the reading process, at the pre-transfer level, to access a variety of texts.
- Evaluate, at the pre-transfer level, primary and secondary sources.
- Apply, at the pre-transfer level, critical thinking strategies, such as summary, analysis, evaluation, and synthesis, to engage in both the reading and writing process.

AND

Prerequisite

FIRE30 - Fire Protection Organization

Or current volunteer, paid call, or seasonal or full-time firefighter for a certified fire protection department. **Outcomes**

- Distinguish between the educational requirements, duties, and information sources for various occupations in fire protection.
- Categorize the basic components of a fire as a chemical reaction, the major phases of fire, and the main factors that influence fire spread and fire behavior, and its effects on environment, at a basic level.
- Identify the various types of public and private fire protection equipment and systems and describe the purpose and scope of their activities, at a basic level.
- Examine fire fighting strategy and tactics using the types of common fire department apparatus, equipment, and personal safety equipment, at a basic level.

AND

Advisory

ENGL85AC - Accelerated Foundations in Academic Literacy

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
No value	No value

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Rationale	No value
Methods of Instruction	Other

Rationale	Other - Problem Solving
Methods of Instruction	Other
Rationale	Other - In class individual, small and large group activities
Methods of Instruction	Other
Rationale	Other - Demonstration of containment and extinguishment techniques
Methods of Instruction	Other
Rationale	Other - Student demonstration activities
Methods of Instruction	Other
Rationale	Other - Video

Assignments

READING
1. Text

WRITING
1. Complete student information sheets
2. Complete student notebooks

OUTSIDE
1. Read, review and study text and handouts
2. Practice manipulative skills

CRITICAL THINKING
1. Through class participation, In given scenarios the student will analyze and evaluate required fire strategies.
2. Through demonstration, the student will explain a positive plan of action in order to demonstrate the required skills for wildland firefighting

Methods of Evaluation	Rationale
Other	Other - Live Fire Simulations
Exams/Tests	No value

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
California State Fire Marshal	California State Fire Marshal Student Manual	California State Fire Marshal	2012	none

Other Instructional Materials

Description Must have instructor approved fire protective gear.

Author

Citation Wildland Firefighting Strategy & Tactics

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

A. Meet the State Fire Marshal requirements for certification in Wildland Firefighting and performing as a Wildland firefighter. This objective covers all SLO's.

CSLOs

Distinguish the salient features in basic wildland firefighting principles. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Inventory the hazards to safety during wildland firefighting suppression. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Demonstrate "size-up" and "report on conditions." Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Determine emergency situation parameters and appropriate strategy during the mitigation effort. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Outline

Course Outline

I. Introduction: Fundamentals of Wildland Fire Control
- A. Wildland fire terminology
- B. Part of a fire
- C. Principles of fire suppression
  - 1. Basic combustion process
  - 2. Methods of heat transfer
  - 3. Fire triangle
  - 4. Breaking the fire triangle
- D. Firefighter Safety
  - 1. Donning fire protective
  - 2. Uses of protective gear
  - 3. Basic firefighter safety rules

II. Overview of Incident Command System
- A. Components of Incident Command Systems
  - 1. Common terminology
  - 2. Modular organization
  - 3. Integrated communications
  - 4. Unified command structure
  - 5. Consolidated action plan
  - 6. Manageable span-of-control
  - 7. Predesignated incident facilities
  - 8. Comprehensive resource management
- B. Organization and Operations
  - 1. Command
  - 2. Organization of incident tactical operations
  - 3. Operations section
  - 4. Planning section
  - 5. Logistics section
  - 6. Finance section

III. Command
- A. Chain of command
- B. Span of control
- C. Unity of command

IV. Size-Up / Report on Conditions
- A. Size-up/report simulations
- B. Plan development
  - 1. Incident Command System Action Plan
  - 2. Incident Command System Forms

V. Extinguishment methods
- A. Use of water
- B. Fine line construction
- C. Tactical use of fire
- D. Fire control resources
  - 1. Air program
  - 2. Camp Program
    - a. Engines
    - b. Hand crews
    - c. Heavy equipment i.e, dozers

VI. Communications
- A. Alternative Methods
- B. Topographical Issues

VII. Strategy and Tactics
- A. Fire management principles

1. Objectives
2. Strategy
3. Tactics

B. Size up
C. Report on conditions
D. Tactical methods
1. Direct attack
2. Parallel attack
3. Indirect attack
4. Other suppression techniques
a. Hot spotting
b. Cold trailing
c. Mop-up

Exhibit F

Merced College
Course Outline of Record Report
06/28/2022

FIRE65E : Introduction to Hazardous Materials Awareness

General Information

Author:	• Bryan Donnelly
Course Code (CB01) :	FIRE65E
Course Title (CB02) :	Introduction to Hazardous Materials Awareness
Cohort:	Fire Technology
Proposal Start:	2020U
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	Clearly Occupational
Distance Education Approved:	No
Course Control Number (CB00) :	No value
Curriculum Committee Approval Date:	09/05/2019
Board of Trustees Approval Date:	10/08/2019
External Review Approval Date:	Pending
Course Description:	This course is a general introduction to hazardous materials awareness with emphasis on placards, identification and recognition, decision-making in emergencies, detecting hazardous materials presence, and estimating the likely harm without intervention.
Submission Rationale:	Mandatory Revision 6 yr. CTE review
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Fire Technology
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)
Course is not a basic skills course.

Course Special Class Status (CB13)
Course is not a special class.

Grade Options
- Letter Grade Methods
- Pass/No Pass

☐ Allow students to gain Credit for Prior

Allowed Number of Retakes

Course Prior To College Level (CB21)

Learning (CPL) 0 No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

☐ Course is part of a program (CB24)

Associated Program	Award Type	Active
No value	No value	

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07) 0.5

Maximum Credit Units (CB06) 0.5

Total Course In-Class (Contact) Hours 9

Total Course Out-of-Class Hours 18

Total Student Learning Hours 27

Faculty Load 0

Credit / Non-Credit Options

Course Credit Status (CB04)	Course Non Credit Category (CB22)	Non-Credit Characteristic
Credit - Degree Applicable	Credit Course.	No Value

Course Classification Code (CB11)
Credit Course.

Funding Agency Category (CB23)
No value

Cooperative Work Experience Education Status (CB10)

☐ Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	0.5	1
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	9
Laboratory	0
Activity	0
Total	9

Course Out-of-Class Hours

Lecture	18
Laboratory	0
Activity	0
Total	18

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85A - Foundations in Academic Litera

- A. Use the reading process, at the pre-transfer level, to access a variety of texts.
- A1. Make connections between course readings and prior knowledge.
- A4. Annotate a variety of texts to identify thesis, primary support, and other rhetorical features.

- C. Apply, at the pre-transfer level, critical thinking strategies of summary, analysis, evaluation, and synthesis to engage with the ideas of texts.

Outcomes

- Use the reading process, at the pre-transfer level, to access a variety of texts.
- Evaluate, at the pre-transfer level, primary and secondary sources.
- Apply, at the pre-transfer level, critical thinking strategies, such as summary, analysis, evaluation, and synthesis, to engage in both the reading and writing process.

AND

Prerequisite

FIRE30 - Fire Protection Organization

Or current volunteer, paid call, or seasonal or full-time firefighter fora certified fire protection department. **Outcomes**

- Distinguish between the educational requirements, duties, and information sources for various occupations in fire protection.
- Categorize the basic components of a fire as a chemical reaction, the major phases of fire, and the main factors that influence fire spread and fire behavior, and its effects on environment, at a basic level.
- Identify the various types of public and private fire protection equipment and systems and describe the purpose and scope of their activities, at a basic level.
- Examine fire fighting strategy and tactics using the types of common fire department apparatus, equipment, and personal safety equipment, at a basic level.

AND

Advisory

ENGL85AC - Accelerated Foundations in Academic Literacy

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
No value	No value

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Rationale	No value

Methods of Instruction	Other
Rationale	Other - Problem Solving
Methods of Instruction	Other
Rationale	Other - Videos and slides

Assignments

READING
1. Handouts
2. Text

WRITING
1. Complete class handout material

OUTSIDE
1. Read, review and study text and handouts
2. Read and complete handout materials

CRITICAL THINKING
1. The student will demonstrate the ability to detect the presence of hazardous materials
2. The student will demonstrate the proper steps in decision-making when presented with a scenario regarding hazardous materials.

Methods of Evaluation	Rationale
Class Participation	No value
Other	Other - Class assignments
Other	Other - Group activities

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
IFSTA	Hazardous Materials For First Responders	IFSTA	2017	978-0-87939-613-8

Other Instructional Materials

Description	Instructor prepared hand out materials
Author	
Citation	Introduction to Hazardous Materials Awareness
Description	State Fire Marshal defined materials if state certification is given.
Author	

Citation	Introduction to Hazardous Materials Awareness
Description	Current Federal Department of Transportation Emergency Response Guidebook (ERG)
Author	
Citation	Introduction to Hazardous Materials Awareness
Description	Student should be able to access the most current Department of Transportation Emergency Response Guidebook (DOT ERG)
Author	No value
Citation	No value

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

A. Meet the required standards for certification according to the California State Fire Marshal guidelines. This covers all SLO's.

CSLOs

Formulate a general awareness of hazardous materials. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Construct a basic understanding of the effects of an exposure to hazardous materials. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Categorize the nine D.O.T. Hazard Classification Symbols and thier associated hazards. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.

Computation - Use mathematical skills and various aspects of technology appropriate to the task

Inventory the steps in detecting the presence of hazardous materials. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Outline

Course Outline

I. Hazardous Materials, and Overview of the Problem
- A. Definition of hazardous materials
- B. Hazardous materials categories and classification
- C. Hazardous materials location
- D. Hazardous materials incidents

II. Decision-making in Emergencies
- A. D.E.C.I.D.E. process steps
- B. Analysis processes

III. Detecting Hazardous Materials Presence
- A. Clues for detecting hazardous materials presence
- B. Practical exercise and discussion
- C. Recognition

IV. Estimating Likely Harm without Intervention
- A. Concept of events analysis
- B. Events analysis
- C. Likely outcome in emergencies

V. Identifying Hazardous Materials
- A. Identification of specific name of material
- B. Sources for identifying characteristics and behavior

VI. Arriving First on Scene
- A. D.O.T. guidebook
- B. Visualizing hazardous materials behavior

Exhibit G

Merced College
Course Outline of Record Report
06/28/2022

FIRE65F : Hazardous Materials - First Responder Operations (H M F.R.O.)

General Information

Author:	• Bryan Donnelly
Course Code (CB01) :	FIRE65F
Course Title (CB02) :	Hazardous Materials - First Responder Operations (H M F.R.O.)
Cohort:	Fire Technology
Proposal Start:	2020U
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	Clearly Occupational
Distance Education Approved:	No
Course Control Number (CB00) :	CCC000351575
Curriculum Committee Approval Date:	09/05/2019
Board of Trustees Approval Date:	10/08/2019
External Review Approval Date:	Pending
Course Description:	This course covers how hazardous materials can harm people, the environment and property and how the first responder may use clues to recognize a hazardous materials incident and implement actions to protect themselves and the public
Submission Rationale:	Mandatory Revision 6 yr. CTE review
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Fire Technology
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Letter Grade Methods
- Pass/No Pass

☐ Allow students to gain Credit for Prior

Allowed Number of Retakes

Course Prior To College Level (CB21)

Learning (CPL)	0	No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

☐ Course is part of a program (CB24)

Associated Program	Award Type	Active
No value	No value	

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07)	1
Maximum Credit Units (CB06)	1
Total Course In-Class (Contact) Hours	20.7
Total Course Out-of-Class Hours	41.4
Total Student Learning Hours	62.1
Faculty Load	0

Credit / Non-Credit Options

Course Credit Status (CB04)	Course Non Credit Category (CB22)	Non-Credit Characteristic
Credit - Degree Applicable	Credit Course.	No Value

Course Classification Code (CB11)
Credit Course.

☐ Variable Credit Course

Funding Agency Category (CB23)
Not Applicable.

☐ Cooperative Work Experience Education Status (CB10)

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	1.15	2.3
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	20.7
Laboratory	0
Activity	0
Total	20.7

Course Out-of-Class Hours

Lecture	41.4
Laboratory	0
Activity	0
Total	41.4

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85A - Foundations in Academic Litera

- A. Use the reading process, at the pre-transfer level, to access a variety of texts.
- A1. Make connections between course readings and prior knowledge.
- A2. Utilize inferencing when scanning texts to draw conclusions.
- A4. Annotate a variety of texts to identify thesis, primary support, and other rhetorical features.

- C. Apply, at the pre-transfer level, critical thinking strategies of summary, analysis, evaluation, and synthesis to engage with the ideas of texts.

Outcomes

- Use the reading process, at the pre-transfer level, to access a variety of texts.
- Evaluate, at the pre-transfer level, primary and secondary sources.
- Apply, at the pre-transfer level, critical thinking strategies, such as summary, analysis, evaluation, and synthesis, to engage in both the reading and writing process.

AND

Advisory

FIRE30 - Fire Protection Organization

Or currently a paid call, seasonal, or full-time firefighter. **Outcomes**

- Distinguish between the educational requirements, duties, and information sources for various occupations in fire protection.
- Categorize the basic components of a fire as a chemical reaction, the major phases of fire, and the main factors that influence fire spread and fire behavior, and its effects on environment, at a basic level.
- Identify the various types of public and private fire protection equipment and systems and describe the purpose and scope of their activities, at a basic level.
- Examine fire fighting strategy and tactics using the types of common fire department apparatus, equipment, and personal safety equipment, at a basic level.

AND

Advisory

ENGL85AC - Accelerated Foundations in Academic Literacy

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
No value	No value

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Rationale	No value

Methods of Instruction	Other
Rationale	Other - Films and/or videotapes
Methods of Instruction	Demonstration
Rationale	No value
Methods of Instruction	Other
Rationale	Other - Scenario exercises

Assignments

READING
1. Text
WRITING
1. Incident reports relating to the class scenario exercises
OUTSIDE
1. Textbook reading assignments
CRITICAL THINKING
1. Given scenarios depicting a "haz mat" event the student will evaluate the incident and and type of event.
2. Given a scenario depicting a "haz mat" event the student will identify the operations and initial actions to be taken.
3. Given a scenario depicting a "haz mat" incident the student will plan methods to be used to communicate and coordinate with agencies from all levels of government.
4. Given a scenario depicting a "haz mat" event the student will plan a safe and competent response to the incident.

Methods of Evaluation	Rationale
Other	Other - Skill Tests
Papers	No value
Class Participation	No value

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
California State Fire Marshal	Student Manual: Hazardous Materials First Responder Operations	California State Fire Marshal	01-01-2007	

Other Instructional Materials

Description	Current Federal Department of Transportation Hazardous Materials Emergency Response Guide
Author	
Citation	Hazardous Materials - First Responder Operations (H M F.R.O.)

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

A1. Meet the requirements for certification as described by the California State Fire Marshals' office.

A. This objective applies to all SLOs

CSLOs

Analyze at least three typical outward warning signs of a hazmat release

Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Categorize typical occupancies, manners, and locations in a community where hazardous materials are manufactured, transported, stored, used, or disposed of;

Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Inspect the components of a placard

Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Identify the basic elements of a "Mental Safe Approach Tactic" and describe the meaning of the "Mental Safe Approach Tactic;"

Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core
ISLOs Computation - Use mathematical skills and various aspects of technology appropriate to the task

Global & Community Consciousness and Responsibility - Demonstrate an understanding of different cultures and knowledge of historical eras and the important of community involvement

Relate the six ways Haz Mat events can harm/kill response personnel

Expected SLO Performance: 70.0

ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs	

Outline

Course Outline

I. Introduction to Haz Mat at the FRO level

II. **Hazardous Materials Recognition and Safety**
- A. Importance of Recognizing Haz Mat Incidents
- B. Haz Mat Recognition Clues
- C. Haz Mat Outward Warning Signs
- D. Special Markings
- E. US DOT Placards and Labels
- F. Shipping Papers and MSDSs
- G. First Operational Thought
- H. Death and Injury Due to Lack of Safety Guides

III. Safety, Isolation and Notifications
- A. Definition of "FRO" and "FRA"
- B. First Operational Thought
- C. Safe Approach and Assessment
- D. Initial Actions
- E. General Safety Precautions and Do's /Don'ts
- F. First Operational Priority
- G. Requirements for Notifications

IV. Introduction to Incident Command

IV. **Identification, Hazard Assessment and Action Planning**
- A. Identification and Hazard Assessment
- B. Material Safety Data Sheets
- C. NA Emergency Response Guidebook
- D. CHEMTREC
- E. Components of Hazard Assessment
- F. Chemical Terms
- G. Variables/Modifying Conditions
- H. Behavior and Natural Stabilization
- I. Intelligence vs. Information
- J. Action Planning Required

V. Protective Equipment and First Responder Limitations
- A. IDHA and Protective Equipment
- B. Routes of Entry for Human Exposure
- C. Typical Hazards On-Scene
- D. Protective Clothing Levels
- E. Criteria for Selecting Protective Clothing Level
- F. Need for Respirators and Breathing apparatus
- G. Environmental Monitoring and Sampling Devices
- H. Limits of Protective Equipment

VI. Haz Mat Release Countermeasures
- A. First Responder at the "Operations" Level
- B. All Haz Mat Events Eventually stabilize
- C. Three Strategies to Deal with a Release
- D. Containment Defined
- E. When and Why containment is Appropriate
- F. Methods of Containment
- G. Initial Containment Techniques

VII. Protective Equipment and First Responder Limitations
- A. IDHA and Protective Equipment
- B. Routes of Entry for Human Exposure
- C. Typical Hazards On-Scene
- D. Protective Clothing Levels

E. Criteria for Selecting Protective Clothing Level
F. Need for Respirators and Breathing Apparatus
G. Environmental Monitoring and Sampling Devices
H. Limits of Protective Equipment

VIII. Protective Actions

A. Protective Actions
B. Protective Actions considerations
C. Evacuation Issues
D. Shelter in Place Issues

IX. Agency coordination and Pre-Event Plans

A. Typical First Responder Agencies
B. Other Local Haz Mat Agencies
C. Key State Haz Mat Agencies
D. Key Federal Haz Mat Agencies
E. Private Sector Haz Mat Resources
F. Enhancing Agency coordination and Communications
G. Know Local/Employer Haz Mat Plan
H. Pre-Event vs. Event Specific Plans

X. Safe and competent Haz Mat Response

A. The Need and Basics of a Process
B. The "Acronym" Process
C. The "Checklist" Process
D. "Applying" the Process
E. Your own "Mind Jogger" Process

XI. The Media and Haz Mat Legal Aspects

Exhibit H

Merced College
Course Outline of Record Report
06/28/2022

FIRE65G : First Responder Operations -- Decontamination (DECON FRO)

General Information

Author:	• Bryan Donnelly
Course Code (CB01) :	FIRE65G
Course Title (CB02) :	First Responder Operations -- Decontamination (DECON FRO)
Cohort:	Fire Technology
Proposal Start:	2020U
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	Clearly Occupational
Distance Education Approved:No	
Course Control Number (CB00) :CCC000455117	
Curriculum Committee Approval Date:09/05/2019	
Board of Trustees Approval Date:10/08/2019	
External Review Approval Date:Pending	
Course Description:	This course covers how to safely and competently perform "Fully/Primary" decontamination in at least "Level B" personal protective equipment, based on agency or generic Decon SOP. This course builds upon FRO competencies, to perform Decontamination functions within the Contamination Reduction Zone
Submission Rationale:	Mandatory Revision 6 yr. CTE Review
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Fire Technology
Alternate Master Discipline Preferred:No value	
Bachelors or Associates Discipline Preferred:No value	
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Letter Grade Methods
- Pass/No Pass

☐ Allow students to gain Credit for Prior Learning (CPL)

Allowed Number of Retakes

0

Course Prior To College Level (CB21)

No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

☐ Course is part of a program (CB24)

Associated Program

No value

Award Type

No value

Active

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07)	0.5
Maximum Credit Units (CB06)	0.5
Total Course In-Class (Contact) Hours	9
Total Course Out-of-Class Hours	27
Total Student Learning Hours	36
Faculty Load	0

Credit / Non-Credit Options

Course Credit Status (CB04)
Credit - Degree Applicable

Course Non Credit Category (CB22)
Credit Course.

Non-Credit Characteristic
No Value

Course Classification Code (CB11)
Credit Course.

☐ Variable Credit Course

Funding Agency Category (CB23)
Not Applicable.

☐ Cooperative Work Experience Education Status (CB10)

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	0.5	1.5
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	9
Laboratory	0
Activity	0
Total	9

Course Out-of-Class Hours

Lecture	27
Laboratory	0
Activity	0
Total	27

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

FIRE30 - Fire Protection Organization

Or current volunteer, paid call, or seasonal or full-time firefighter for acertified fire protection department. **Outcomes**

- Distinguish between the educational requirements, duties, and information sources for various occupations in fire protection.
- Categorize the basic components of a fire as a chemical reaction, the major phases of fire, and the main factors that influence fire spread and fire behavior, and its effects on environment, at a basic level.
- Identify the various types of public and private fire protection equipment and systems and describe the purpose and scope of their activities, at a basic level.
- Examine fire fighting strategy and tactics using the types of common fire department apparatus, equipment, and personal safety equipment, at a basic level.

AND

Advisory

FIRE65F - Hazardous Materials - First Responder Operations (H M F.R.O.)

Objectives

- A1. Meet the requirements for certification as described by the California State Fire Marshals' office.
- A. This objective applies to all SLOs

Outcomes

- Analyze at least three typical outward warning signs of a hazmat release
- Categorize typical occupancies, manners, and locations in a community where hazardous materials are manufactured, transported, stored, used, or disposed of;
- Inspect the components of a placard
- Identify the basic elements of a "Mental Safe Approach Tactic" and describe the meaning of the "Mental Safe Approach Tactic;"
- Relate the six ways Haz Mat events can harm/kill response personnel

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
No value	No value

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Rationale	No value

Methods of Instruction	Other
Rationale	Other - Films and/or videotapes
Methods of Instruction	Demonstration
Rationale	No value
Methods of Instruction	Other
Rationale	Other - Scenario exercises

Assignments

READING
1. Text
WRITING
1. Forms relating to the class scenarios, field exercises, and state mandated reports.
OUTSIDE
1. Textbook reading assignments
CRITICAL THINKING
1. Participate in an activity requiring the student to properly don and doff "Level B" personal protective equipment, and complete a practical exercise involving the performance of common manipulative tasks while wearing "Level B" personal protective equipment, an describe proper medical monitoring procedures and applicable hand signals before participating in the functional exercise;
2. Perform "Full/Primary" Decon, in "Level B" personal protective equipment

Methods of Evaluation	Rationale
Other	Other - Skill Tests
Class Participation	No value
Exams/Tests	No value

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
California Specialized Training Institute	Student Manual: First Responder, Operations, Decontamination	State of California, Specialized Training Institute	01-01-2009	

Other Instructional Materials

No Value

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

A1. Meet the requirements for performing hazardous materials decontamination according to established California State Fire Marshal guidelines.

A. Applies to all SLOs.

CSLOs

Examine the need for Decontamination training for First Responder, Operations level trained personnel (FROs). Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Categorize the basic principles of Decontamination. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Describe the protocols for performing "Full/Primary" Decontamination, consistent with FIRESCOPE ICS Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Outline

Course Outline

I. Understanding the need for Decontamination training for FROs

II. Theoretical Principles of Decon

A. Why and when Decon is performed
B. Who and what gets deconned
C. Procedural guides that should follow a logical sequence to get from "Dirty" to "Clean"
D. Key methods of Decon
E. Key types of Decon
F. Factors that affect Decon process
G. Differentiating between emergency and full/primary Decon

III. Decon Protocols Overview

A. Decon within the ICS organization
B. Duties of Decon Team Leader
C. Minimum number of personnel to do Full/Primary Decon
D. Three Control Zones

E. Three key considerations in locating the "Contamination Reduction Corridor" (CRC)
F. Stations and layout needed to set-up a CRC
G. Basic equipment needed to set-up a CRC
H. Basic procedures to set-up and perform Full/Primary Decon
I. Three special considerations when performing Decon
J. ICS form where Decon procedures listed
H. Decon Demonstration and Practice
    1. Hands on safe operations
    2. Selection of safe site for a CRC
    3. Proper set-up of equipment for Full/Primary Decon
    4. Safe and effective management and performance
    5. Proper use of control zones, and maintaining proper PPE for any personnel in zones

Exhibit I

Merced College

Course Outline of Record Report

06/28/2022

FIRE66D : Equipment Operator for Volunteer Firefighters

General Information

Author:	• Bryan Donnelly
Course Code (CB01) :	FIRE66D
Course Title (CB02) :	Equipment Operator for Volunteer Firefighters
Cohort:	Fire Technology
Proposal Start:	2020U
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	Clearly Occupational
Distance Education Approved:	No
Course Control Number (CB00) :	CCC000382177
Curriculum Committee Approval Date:	09/05/2019
Board of Trustees Approval Date:	10/08/2019
External Review Approval Date:	Pending
Course Description:	This course provides the firefighter with basic knowledge of radio communications use regarding size-up and report conditions. Forms and reports related to operating equipment and incidents are covered as well as emergency equipment placement, and strategy and tactics for structure, wildland and vehicle fires. Auto extrication and defensive driving and pump theory are included.
Submission Rationale:	Mandatory Revision 6 yr. CTE Review
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Fire Technology
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Letter Grade Methods
- Pass/No Pass

☐ Allow students to gain Credit for Prior Learning (CPL)

Allowed Number of Retakes

0

Course Prior To College Level (CB21)

No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

☐ Course is part of a program (CB24)

Associated Program

No value

Award Type

No value

Active

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07)	2
Maximum Credit Units (CB06)	2
Total Course In-Class (Contact) Hours	36
Total Course Out-of-Class Hours	72
Total Student Learning Hours	108
Faculty Load	0

Credit / Non-Credit Options

Course Credit Status (CB04)
Credit - Degree Applicable

Course Non Credit Category (CB22)
Credit Course.

Non-Credit Characteristic
No Value

Course Classification Code (CB11)
Credit Course.
Variable Credit Course

Funding Agency Category (CB23)
Not Applicable.

☐ Cooperative Work Experience Education Status (CB10)

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	2	4
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18
Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	36
Laboratory	0
Activity	0
Total	36

Course Out-of-Class Hours

Lecture	72
Laboratory	0
Activity	0
Total	72

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85A - Foundations in Academic Litera

Objectives

- A. Use the reading process, at the pre-transfer level, to access a variety of texts.
- A1. Make connections between course readings and prior knowledge.
- A2. Utilize inferencing when scanning texts to draw conclusions.
- A4. Annotate a variety of texts to identify thesis, primary support, and other rhetorical features.
- C. Apply, at the pre-transfer level, critical thinking strategies of summary, analysis, evaluation, and synthesis to engage with the ideas of texts.

Outcomes

- Use the reading process, at the pre-transfer level, to access a variety of texts.
- Evaluate, at the pre-transfer level, primary and secondary sources.
- Apply, at the pre-transfer level, critical thinking strategies, such as summary, analysis, evaluation, and synthesis, to engage in both the reading and writing process.

AND

Prerequisite

FIRE30 - Fire Protection Organization

Or current volunteer/paid call, seasonal or full-time firefighter for a certified fire protection department **Outcomes**

- Distinguish between the educational requirements, duties, and information sources for various occupations in fire protection.
- Categorize the basic components of a fire as a chemical reaction, the major phases of fire, and the main factors that influence fire spread and fire behavior, and its effects on environment, at a basic level.
- Identify the various types of public and private fire protection equipment and systems and describe the purpose and scope of their activities, at a basic level.
- Examine fire fighting strategy and tactics using the types of common fire department apparatus, equipment, and personal safety equipment, at a basic level.

AND

Advisory

ENGL85AC - Accelerated Foundations in Academic Literacy

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
Full-time firefighter or minimum of one continuous year as a paid-call firefighter. Valid California Class B (Commercial or Firefighter) permit with Tank and Air Brake endorsements. If the student has a	No Value

Commercial California Driver's License, it must indicate Manual Transmission and have a current Health Questionnaire.

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Rationale	No value
Methods of Instruction	Other
Rationale	Other - Problem Solving
Methods of Instruction	Other
Rationale	Other - In class individual, small and large group activities
Methods of Instruction	Other
Rationale	Other - Demonstration of Positioning techniques
Methods of Instruction	Other
Rationale	Other - Demonstration of rescue techniques
Methods of Instruction	Other
Rationale	Other - Video

Assignments

READING
1. Student information sheets
2. Class handout materials

WRITING
1. Complete student information sheets
2. Complete class notebook
3. Complete Report Forms

OUTSIDE
1. Reading student information sheets
2. Practice equipment safety procedures
3. Practice manipulative skills

CRITICAL THINKING

1. The student will analyze and evaluate required strategies in scenario participation.
2. The student will implement a positive plan of action in order to demonstrate the required skills for performing as an operator of emergency apparatus.

Methods of Evaluation	Rationale
Other	Other - Demonstration of competency in use of all equipment
Class Participation	No value
Simulation	No value
Written examinations	No value

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
No Value	No Value	No Value	No Value	No Value

Other Instructional Materials

Description	Instructor handouts and student manuals approved by the State Fire Marshal for course content.
Author	
Citation	Equipment Operator for Volunteer Firefighters

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

Prepare Volunteer Firefighters to operate specialty equipment and apparatus

CSLOs

Distinguish legal requirements, forms, and reports required for equipment and incident response. Expected SLO Performance: 70.0

ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Evaluate proper operation and positioning at fires, rescues, and other emergencies. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs
Computation - Use mathematical skills and various aspects of technology appropriate to the task

Inventory various auto extrication methods. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Describe defensive driving techniques. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Outline

Course Outline

I. Responsibilities, Standards, and Laws

- A. Orientation and Administration
  - 1. California Commercial Driver Handbook
    - a. Code 3 authorization
    - b. Warning systems
    - c. Civil liability
    - d. Rules of the road
- B. Fire Apparatus Driver/Operator Responsibilities
  - 1. California Vehicle Code
  - 2. California Commercial Driver Handbook
  - 3. NFPA 1002: Standard for Fire Apparatus Driver/Operator Professional Qualifications
- C. Legal Aspects of Emergency and Nonemergency Driving

II. Forms and Reports

- A. MC 102
- B. EDT report form
- C. Motor Vehicle Accident report form
- D. LE-66 Preliminary Fire Investigation report
- E. FC-33 Overhead Crew and Equipment report
- F. ME-101 Daily Equipment report
- G. ME-14 Faulty Equipment report

III. Emergency Equipment Placement

- A. Positioning at fires
- B. Positioning at rescues
- C. Positioning at other emergencies

IV. Strategy and Tactics

- A. Structure fires
- B. Wildland fires
- C. Vehicle fires

V. Pre-Trip

- A. DL 533 score sheet
- B. Inspection
- C. Maintenance
- D. Washing

VI. Auto Extrication

- A. Safety/Patient care
- B. Vehicle stabilization

C. Equipment and Techniques

VII. E.V.O.C.

A. Defensive Driving Techniques
   1. Defensive Driving
   2. Factors of Defensive Driving
   3. The Defensive Driver
   4. Factors Contributing to Accidents
   5. Safe Driving Techniques
B. Principles of Code 3 Response
C. Procedures
D. Roadway Operations
E. Driving Apparatus to Incidents
F. Principles of Off-Road Driving
   1. Off-Road Defined
   2. Indications That Lead to Off-Road Operations
   3. Risks of Off-Road Operations
   4. Driving on Dirt Roads
   5. Driving Without Roads
   6. Four-Wheel Drive
   7. Operations Near Other Equipment
   8. Safety Precautions
G. Principles of Braking and Stopping
   1. Braking
   2. Four Factors Determine Stopping Distance
   3. Braking Technique
H. Principles of Steering and Load Control
   1. Physical Forces That Affect Control
   2. Weight Transfer
   3. Tire Contact Patches
   4. Skids
   5. Steering in Curves
   6. Typical Turn Classifications
   7. Control Considerations
   8. Steering Control
   9. Tire Failure
   10. Skid Control
I. Driving During Adverse Weather Conditions
   1. Adverse Weather Conditions
   2. Equipment
J. Driving exercises
   1. Lane change
   2. Dogleg
   3. Alley dock
   4. AL 170 Check Out Drive

VIII. Pump Theory

A. Pump types
B. Relief values
C. Hydraulics
D. Pump cavitation
E. Plumbing systems
F. Transmitting power to pumps
G. Relay pumping
H. Pump evolutions
I. Field exercise
   1. Pumping from draft
   2. Pumping from hydrant
   3. Pumping from tank

Exhibit J

Merced College
Course Outline of Record Report
06/28/2022

FIRE67A : Low Angle Rope Rescue, Operational

General Information

Author:	• Bryan Donnelly
Course Code (CB01) :	FIRE67A
Course Title (CB02) :	Low Angle Rope Rescue, Operational
Cohort:	Fire Technology
Proposal Start:	2020U
TOP Code (CB03) :	No value
CIP Code:	No value
SAM Code (CB09) :	No value
Distance Education Approved:	No
Course Control Number (CB00) :	CCC000619478
Curriculum Committee Approval Date:	09/05/2019
Board of Trustees Approval Date:	10/08/2019
External Review Approval Date:	Pending
Course Description:	This course is designed to introduce the novice to the basics of equipment nomenclature, rope design and construction, care and maintenance, knots and webbing, as they apply to rope rescue emergencies.
Submission Rationale:	Mandatory Revision 6 yr. CTE Review. Title Change (State Fire Marshal course)
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Fire Technology
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Pass/No Pass
- Letter Grade Methods

☐ Allow students to gain Credit for Prior

Allowed Number of Retakes

Course Prior To College Level (CB21)

Learning (CPL)	0	Not applicable.

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

☐ Course is part of a program (CB24)

Associated Program	Award Type	Active
No value	No value	

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07) 1

Maximum Credit Units (CB06) 1

Total Course In-Class (Contact) Hours 18

Total Course Out-of-Class Hours 36

Total Student Learning Hours 54

Faculty Load 0

Credit / Non-Credit Options

Course Credit Status (CB04)	Course Non Credit Category (CB22)	Non-Credit Characteristic
Credit - Degree Applicable	Credit Course.	No Value

Course Classification Code (CB11)
Credit Course.

Funding Agency Category (CB23)
No value

Cooperative Work Experience Education Status (CB10)

☐ Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	1	2
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	18
Laboratory	0
Activity	0
Total	18

Course Out-of-Class Hours

Lecture	36
Laboratory	0
Activity	0
Total	36

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85A - Foundations in Academic Literacy I

Objectives

- A1. Make connections between course readings and prior knowledge.
- A4. Annotate a variety of texts to identify thesis, primary support, and other rhetorical features.
- C. Apply, at the pre-transfer level, critical thinking strategies of summary, analysis, evaluation, and synthesis to engage with the ideas of

texts.

Outcomes

- Apply, at the pre-transfer level, critical thinking strategies, such as summary, analysis, evaluation, and synthesis, to engage in both the reading and writing process.

AND

Prerequisite

FIRE30 - Fire Protection Organization

Outcomes

- Examine fire fighting strategy and tactics using the types of common fire department apparatus, equipment, and personal safety equipment, at a basic level.

AND

Advisory

ENGL85AC - Accelerated Foundations in Academic Literacy

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
No value	No value

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Rationale	No value
Methods of Instruction	Other
Rationale	Other - Problem Solving

Methods of Instruction	Other
Rationale	Other - In class individual, small and large group activities
Methods of Instruction	Other
Rationale	Other - Demonstration of rescue techniques
Methods of Instruction	Other
Rationale	Other - Video

Assignments

READING
1. Handouts

WRITING
1. Complete student information sheets
2. Complete student notebooks

OUTSIDE
1. Read, review and study handouts
2. Practice manipulative skills

CRITICAL THINKING
1. The student will evaluate the situation and proper use of specific knots.
2. The student will demonstrate proper use of specific knots.

Methods of Evaluation	Rationale
Other	Other - Manipulative skills testing
Other	Other - Application in simulated situations

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
No Value	No Value	No Value	No Value	No Value

Other Instructional Materials

Description	Hand out materials

Author	
Citation	Rope Rescue
Description	State Fire Marshal required handouts and current forms
Author	No value
Citation	No value

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

No value

CSLOs

Distinguish tools and equipment relative to rope rescue. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Use the required knot tying skills necessary in successful rope rescue scenarios. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Describe the proper maintenance and storage of rope rescue equipment. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Outline

Course Outline

I. Definitions

II. Common rope types

A. Three strand laid rope (dynamic line)
   1. Main strands
   2. Twisted yarns
   3. Yarns
   4. Fibers

B. Braided Ropes (static line)
   1. Diamond Bread
   2. Main strand
   3. Fibers

C. Braid on Braid (static line)
    1. Outer jacket or sheath
    2. Herring bone braid
    3. Main strand (yard bundles)
    4. Fibers
D. Kernmantle Rope (dynamic line)
    1. Outer jacket or sheath
    2. Diamond braids
    3. Main strands (yarn bundles)
    4. Fibers
E. Kernmantle Rope (static line)
    1. Outer jacket or sheath
    2. Parallel yarn bundles
    3. Yarns
    4. Fibers

III. Tubular Webbing Construction Types

A. Spiral
B. Chain

IV. Rescue Knots

A. Figure 8 stopper
B. Figure 8 bend
C. Figure 8 follow through
D. Figure 8 on a bight
E. Three-wrap prusik
F. Bowline
G. Overhead
H. Double overhand bend
I. Square knot

V. Attaching Sling to Anchors

A. Single loop
B. Multi loop
C. Three-bight
D. Lark's foot

VI. Load Sharing

A. Two-point load sharing
B. Two-point load sharing with load shift
C. Three-point load sharing
D. Three-point load sharing with load shift

VII. Load Equalizing

A. Two-point load equalizing
B. Two-point load equalizing with load shift
C. Three-point load equalizing
D. Three-point load equalizing with load shift

VIII. Components of Self-Equalizing Anchors

A. The anchors to be self-equalized
B. Tag lines (if anchors are distant)
C. Self-equalized loop
D. Safety loops and/or double carabineers
E. Proper field angle (maximum 90)

IX. Friction Device Hook-ups/Figure 8 Descent Device

A. Light, medium and heavy duty
B. Double line
C. Lockoff

X. Carabineer Descent Systems

A. Single
B. Double
C. Triple

XI. Rescue Chest Harness

A. Hasty
B. Hanson
C. Chest harness
D. Rappel seat

XII. T.MA Systems and piggyback systems

XIII. Belaying

A. Belaying stance
B. Mechanical belays
C. Belay movements
D. Belaying calls

XIV. Stocks Rigging/Hood-ups/Lashing

A. Fully adjustable pre-rig
B. Hasty rig
C. Vertical raising or lowering
D. Telpher lines
E. Interior and exterior lashing

Exhibit K

Merced College
Course Outline of Record Report
06/28/2022

FIRE67B : Auto Extrication

General Information

Author:	• Bryan Donnelly
Course Code (CB01) :	FIRE67B
Course Title (CB02) :	Auto Extrication
Cohort:	Fire Technology
Proposal Start:	2020U
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	Clearly Occupational
Distance Education Approved:	No
Course Control Number (CB00) :	CCC000461376
Curriculum Committee Approval Date:	09/05/2019
Board of Trustees Approval Date:	10/08/2019
External Review Approval Date:	Pending
Course Description:	This course provides classroom instruction of vehicle rescue concepts. It introduces students to common vehicle rescue tools and hands-on practice of basic techniques used to free persons entrapped in vehicles as a result of traffic collisions. To successfully complete the skills portion, students must have the ability to lift tools that may weigh in excess of 50 pounds and perform other rigorous physical tasks. Students must supply instructor approved personal protective equipment (required instructional material) equivalent to that of a structural firefighting ensemble. This shall, at a minimum, include a helmet with face shield and/or goggles, leather gloves, turnout coat and pants, and turnout boots (or steeltoed lace-up leather boots at least 8" in height with lugged soles).
Submission Rationale:	Mandatory Revision 6 yr. CTE Review
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Fire Technology
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Letter Grade Methods
- Pass/No Pass

☐ Allow students to gain Credit for Prior Learning (CPL)

Allowed Number of Retakes

0

Course Prior To College Level (CB21)

No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

☐ Course is part of a program (CB24)

Associated Program

No value

Award Type

No value

Active

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07) 0.5

Maximum Credit Units (CB06) 0.5

Total Course In-Class (Contact) Hours	9
Total Course Out-of-Class Hours	18
Total Student Learning Hours	27
Faculty Load	0

Credit / Non-Credit Options

Course Credit Status (CB04)	Course Non Credit Category (CB22)	Non-Credit Characteristic
Credit - Degree Applicable	Credit Course.	No Value

Course Classification Code (CB11)	Funding Agency Category (CB23)	Cooperative Work Experience Education Status (CB10)
Credit Course.	Not Applicable.	☐

☐ Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	0.5	1
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	9
Laboratory	0
Activity	0
Total	9

Course Out-of-Class Hours

Lecture	18
Laboratory	0
Activity	0
Total	18

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85A - Foundations in Academic Litera

Objectives

- A1. Make connections between course readings and prior knowledge.
- C. Apply, at the pre-transfer level, critical thinking strategies of summary, analysis, evaluation, and synthesis to engage with the ideas of texts.

Outcomes

- Apply, at the pre-transfer level, critical thinking strategies, such as summary, analysis, evaluation, and synthesis, to engage in both the reading and writing process.

AND

Prerequisite

FIRE30 - Fire Protection Organization

Or currently a paid call, seasonal, or full-time firefighter **Outcomes**

- Categorize the basic components of a fire as a chemical reaction, the major phases of fire, and the main factors that influence fire spread and fire behavior, and its effects on environment, at a basic level.
- Examine fire fighting strategy and tactics using the types of common fire department apparatus, equipment, and personal safety equipment, at a basic level.

AND

Advisory

ENGL85AC - Accelerated Foundations in Academic Literacy

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
No value	No value

Specifications

Methods of Instruction

Methods of Instruction	Lecture

Rationale	No value
Methods of Instruction	Other
Rationale	Other - Films and/or videotapes
Methods of Instruction	Demonstration
Rationale	No value
Methods of Instruction	Other
Rationale	Other - Scenario exercises

Assignments

READING
1. Text
WRITING
1. Papers relating to the class scenario exercises
OUTSIDE
1. Textbook reading assignments
CRITICAL THINKING
1. Given a scenario depicting a "pin-in" situation, the student will evaluate the incident and identify the factors relating to rescuer safety and the potential for further injury of trapped vehicle occupants.
2. Given a scenario depicting a "pin-in" situation, the student will identify the fire service extrication tools that would be used to extricate the victim and describe the proper use of those tools.
3. Given a scenario depicting a "pin-in" situation, the student will develop a plan for extrication while identifying which vehicle components will function to impede or assist the rescue.

Methods of Evaluation	Rationale
Other	Other - Skill Tests
Class Participation	No value
Exams/Tests	No value

Equipment

Students must supply instructor approved personal protective equipment (required instructional material) equivalent to that of a structural firefighting ensemble. This shall, at a minimum, include a helmet with face shield and/or goggles, leather gloves, turnout coat and pants, and turnout boots (or steeltoed lace-up leather boots at least 8" in height with lugged soles).

Textbooks

Author	Title	Publisher	Date	ISBN
IFSTA	Principles of Vehicle Extrication	Fire Protection Publications	2017	978-0-87939-597-1

Other Instructional Materials

Description	Instructor handouts
Author	No value
Citation	No value

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

Prepare the student to respond to vehicle incidents that might be encountered during rescue operations and the procedures and systems used during auto extrication.

CSLOs

Describe methods of protecting rescuers and others at highway incidents. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Describe various methods used to remove victims from "pin-ins" accidents. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Categorize vehicle components that assist or impede rescue Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Demonstrate methods of using vehicle components to advantage during rescue. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Demonstrate the use of various fire service extrication tools to free simulated victims. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Outline

Course Outline

I. Brief history of fire service auto extrication work

II. **Becoming an auto extrication "expert"**
- A. Avoiding "Jawsitis," applying common sense to solving rescue problems
- B. Scene assessment
- C. Scene management
- D. Scene safety
- E. The extrication "team"
- F. General vehicle construction
  1. Special considerations in newer vehicles
  2. Supplemental restraint systems (airbags) and their hazards
- G. "Pin-in categories

III. Rescue techniques
- A. Skills
  1. Access and operate/disable door latch/lock mechanism
  2. Create purchase points for spreading tools
  3. Door opening - latch end
  4. Door removal - hinge end
  5. Roofflap - backward, forward, sideward
  6. Roof removal
  7. Remove back of front seat
  8. Displace seat
  9. Displace steering wheel
  10. Displace steering column - push
  11. Displace steering column - pull
  12. Displace pedal
  13. Dash roll- with spreader/ram/other
  14. Displace floorboard/firewall (forward)
  15. Displace interior components - console, shifter, floorboard, other
  16. Open side - remove "Bpillar (doors attached)
  17. Open side - remove "B" pillar (one door)
  18. Malee third door - two door vehicle
  19. Trunk tunnel
  20. Pillar/panel pull- anchor opposite
  21. Stabilize vehicle - on wheels
  22. Stabilize vehicle - on top
  23. Stabilize vehicle - on side
  24. Lift/crib vehicle
  25. Windshield removal - specific to vehicle/windshield type
  26. Side/rear glass removal
  27. Access engine compartment/trunk area
  28. Unique evolutions - vehicle specific (hatchbacks. van doors, other)
- B. Rescue tool types
  1. Heavy hydraulic rescue tools
  2. Heavy lift airbags and vehicle stabilization equipment
  3. Lightweight powered and non-powered rescue tools
  4. "Non-rescue" manual tools - applying tools not normally used for rescue
- C. Rescue tool care and maintenance
- D. Rescue tool use
  1. Use of heavy hydraulic rescue tools
  2. Use of heavy lift airbags and vehicle stabilization equipment
  3. Use of lightweight powered and non-powered rescue tools
  4. Use of "Non-rescue" manual tools - applying tools not normally used for rescue

Exhibit L

Merced College
Course Outline of Record Report
06/28/2022

FIRE68B : Basic Incident Command System (I-200)

General Information

Author: • Gabriela Garcia

Course Code (CB01) : FIRE68B

Course Title (CB02) : Basic Incident Command System (I-200)

Cohort: Fire Technology

Proposal Start: 2020U

TOP Code (CB03) : (2133.00) Fire Technology

CIP Code: (43.0201) Fire Prevention and Safety Technology/Technician

SAM Code (CB09) : Clearly Occupational

Distance Education Approved: Yes

Course Control Number (CB00) : CCC000373840

Curriculum Committee Approval Date: 09/05/2019

Board of Trustees Approval Date: 10/08/2019

External Review Approval Date: Pending

This course is designed for the entry-level and veteran firefighter. The subject matter relates to principles and features of ICS, organization, incident facilities, incident resources and responsibilities associated with ICS Assignments. Student must have instructor verified ICS (1-100) completion.

Submission Rationale: No value

No value

Faculty Requirements

Master Discipline • Fire Technology

Alternate Master Discipline Preferred: No value

Bachelors or Associates Discipline Preferred: No value

Additional Bachelors or Associates Discipline Preferred: No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Grade Options

- Letter Grade Methods
- Pass/No Pass

☐ Allow students to gain Credit for Prior Learning (CPL)

Allowed Number of

Course Prior To College Level

0

No value

Retake Policy Description

No value

Credit for Prior Learning assessmentmethods accepted

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

☐ Course is part of a program (CB24)

Associated Program

No value

Award Type

Activ

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07) 1

Maximum Credit Units (CB06) 1

Total Course In-Class (Contact) Hours 18

Total Course Out-of-Class Hours 36

Total Student Learning Hours 54

Faculty Load 0

Credit / Non-Credit Options

Course Credit Status (CB04)

Credit - Degree Applicable

Course Non Credit Category (CB22)

Credit Course.

Non-Credit Characteristic

No Value

Course Classification Code (CB11)
Credit Course.

Funding Agency Category (CB23)
Not Applicable.

☐ Cooperative Work Experience Education Status (CB10)

☐ Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	1	2
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	18
Laboratory	0
Activity	0
Total	18

Course Out-of-Class Hours

Lecture	36
Laboratory	0
Activity	0
Total	36

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity	Type	In Class	Out of
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85A - Foundations in Academic Litera

OR ENGL-85AC OR ENGL-85E **Objectives**

- A. Use the reading process, at the pre-transfer level, to access a variety of texts.
- A1. Make connections between course readings and prior knowledge.
- A2. Utilize inferencing when scanning texts to draw conclusions.

- A4. Annotate a variety of texts to identify thesis, primary support, and other rhetorical features.
- C. Apply, at the pre-transfer level, critical thinking strategies of summary, analysis, evaluation, and synthesis to engage with the ideas of texts.

Outcomes

- Use the reading process, at the pre-transfer level, to access a variety of texts.
- Evaluate, at the pre-transfer level, primary and secondary sources.
- Apply, at the pre-transfer level, critical thinking strategies, such as summary, analysis, evaluation, and synthesis, to engage in both the reading and writing process.

Entrance Skills

Entrance	Descriptio
No value	No value

Limitations on Enrollment

Limitations on	Descriptio

Instructor-verified ICS (I-100) completion. No

Specifications

Methods of Instruction	Lecture
Rational	No value
Methods of	Other
Rational	Other - Videos and slides
Methods of	Other
Rational	Other - Group activities

Assignments

READING
1. Handouts

WRITING
1. Complete student information sheets

2. Complete student notebooks

OUTSIDE

1. Read, review and study handouts

CRITICAL THINKING

1. Given scenario situations the student will identify the command applicable command structure and associated responsibilities.
2. Given scenario situations the student will identify what resources would be needed and how to access those resources.

Methods of Evaluation	Rationale
Other	Other - Class assignments
Other	Other - Testing

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
No Value	No Value	No Value	No Value	No Value

Other Instructional Materials

Descriptio	Hand out materials. Current materials provided by certification and governing agency.
nAuthor	
Citation	Basic Incident Command System (I-200)

Materials Fee

Learning Outcomes and Objectives

Course Objectives

CSLOs

Distinguish between the principles and features of the Incident Command Expected SLO Performance: 70.0

ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
	Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.
	Computation - Use mathematical skills and various aspects of technology appropriate to the task

Inventory the organizational structure, development, and transfer of command.

Expected SLO Performance: 70.0

ISLOs
Core ISLOs

Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.

Computation - Use mathematical skills and various aspects of technology appropriate to the task

Describe the role of the command post, staging area, base camp, helibase, and helispots in a major incident.

Expected SLO Performance: 70.0

ISLOs
Core ISLOs

Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.

Computation - Use mathematical skills and various aspects of technology appropriate to the task

Demonstrate an understanding of the responsibilities associated with various ICS assignments.

Expected SLO Performance: 70.0

ISLOs
Core ISLOs

Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.

Computation - Use mathematical skills and various aspects of technology appropriate to the task

Outline

Course Outline

I. Principals and Features of ICS

- A. Five primary functions
- B. Management
  - 1. Management by objectives
  - 2. Unity and chain of command
  - 3. Transfer of command
  - 4. Organizational flexibility
  - 5. Unified command
  - 6. Span of control
- C. Common terminology
- D. Personnel accountability
- E. Integrated communications
- F. Resources management
- G. Incident Action Plan

II. Organizational Overview

- A. Terminology
- B. Organizational structure
- C. How the organization expands and/or contracts
  - 1. How the organization initially develops at an incident
  - 2. Transfer of command

III. Incident Facilities

- A. Command post
- B. Staging area
- C. Base
- D. Camps
- E. Helibase
- F. Helispots

IV. Incident Resources

A. Resources often used
B. Why resource status keeping is important to effective incident operations
C. Types of resources for various applications
D. Three ways of using resources on an incident
E. Resources status conditions
F. Changing and maintaining status on resources

V. Common Responsibilities Associated with ICS Assignments

A. Prior to leaving for assignment
B. At incident check-in
C. While working on the incident
D. During demobilization

DE Addendum Revisions

Response #1: Explain how time and/or distance will separate the instructor and students. Definition and Application as defined by Title5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

- lecture and all outside activities fully online

Specify "Other" here:

No Value

Response #2: Explain how the instructor will distribute the required number of unit hours per week using technology. Definition andApplication as defined by Title 5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

- lecture video
- discussion board activities
- quiz activities
- supplemental instructional video, such as YouTube, TedTalks, and PBS

Specify "Other" here:

No Value

Response #3: Explain how the instructor will meet ADA requirements in designing this course. Course Quality Standards as defined byTitle 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply)

- work with the College Instructional Designer
- work with the College ADA specialist
- work with the local POCR Team
- receive a 'Badge' from the CVC-OEI Design Academy
- utilize a 'Blueprint' course

Response #4: Explain how the instructor's course will meet the same quality standards as an in-person counterpart. Course Quality Standards as defined by Title 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply) • The online coursewill offer:

- weekly lectures
- discussion opportunities between students weekly
- student-to-student activities such as group work
- regular assessment: both formative and summative
- regular feedback weekly

- re-teaching opportunities

Specify "Other" for Response #3 here:

No Value

Specify "Other" for Response #4 here:

No Value

Response #5: Explain how the instructor will conduct regular and effective contact between the instructor and students. Please includethe time frame parameters. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – select all that apply)

- pre-class 'Welcome Letter'
- weekly lectures
- weekly announcement using the LMS (Canvas)
- online orientation – non-mandatory
- timely feedback within the LMS (Canvas) – within 72-hours of the due date
- midterm and end-of-course surveys
- College email – respond within 24-hours M-F
- LMS (Canvas) email – respond within 24-hours M-F
- periodic online review/study sessions – non-mandatory
- periodic online workshops – non-mandatory

Specify "Other" here:

No Value

Response #6: Explain how the instructor will promote regular and effective contact among students either synchronously or asynchronously. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – selectall that apply)

- weekly discussion boards – robust posts and replies
- LMC (Canvas) email

Specify "Other" here:

No Value

Response #7: This course will strive to meet the quality standards for alignment at 100% as set forth in the CVC-OEI Rubric in one or more of the following ways. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-down menu

– select all that apply)

- The instructor has conducted a self-assessment of the CVC-OEI Rubric.
- The instructor will be using a 'Blueprint' course created by Merced College.

Specify "Other" here:

No Value

Response #8: The following parties will be responsible to ensure the portion of instruction delivered via distance education meetsregular and effective contact. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-downmenu – select all that apply)

- Dean of the Cohort/Department
- Faculty teaching the course

Specify "Other" here:

Response #9: The College has identified the instructor as prepared to teach in a distance, education delivery method consistent withlocal district policies and negotiated agreements in the following ways. Faculty Selection and Workload as defined by Title 5 Section55208. (Possible Responses in the pull-down menu – select all that apply)

- other (specify in comment box)

Specify "Other" here:

Response #10: Explain the process the department faculty used to determine this course was a good fit for online delivery. FacultySelection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu – select all that apply)

Specify "Other" here:

Response #11: The Dean of the discipline supports this course as a good fit for online delivery. Faculty Selection and Workload asdefined by Title 5 Section 55208. (Possible Responses in the pull-down menu)

- Yes

Exhibit M

Merced College
Course Outline of Record Report
06/28/2022

FIRE68C : Incident Command System - Intermediate (I-300)

General Information

Author:	• Gabriela Garcia
Course Code (CB01) :	FIRE68C
Course Title (CB02) :	Incident Command System - Intermediate (I-300)
Cohort:	Fire Technology
Proposal Start:	2018S
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	Clearly Occupational

Distance Education Approved: Yes

Course Control Number (CB00) :CCC000358007

Curriculum Committee Approval

Date:11/16/2017**Board of Trustees Approval**

Date:12/06/2011 **External Review Approval**

Date:11/16/2017 **Course Description:** This course is designed for the entry-level and veteran firefighter. The subject matter relates to organization and staffing for incidents or events, incident resources management, air operations and incident event planning.

Submission Rationale:	No value
	No value

Faculty Requirements

Master Discipline	• Fire Technology

Alternate Master Discipline Preferred: No value

Bachelors or Associates Discipline Preferred: No value

Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

☐ Allow students to gain Credit for Prior Learning (CPL)

Course Special Class Status (CB13)

Course is not a special class.

Allowed Number of Retakes

0

Grade Options

- Letter Grade Methods
- Pass/No Pass

Course Prior To College Level (CB21)

No value

Credit for Prior Learning assessmentmethods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

☐ Course is part of a program (CB24)

Associated Program

No value

Award Type

Activ

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07) 1.5

Maximum Credit Units (CB06) 1.5

Total Course In-Class (Contact) Hours 27

Total Course Out-of-Class Hours 54

Total Student Learning Hours 81

Faculty Load 0

Credit / Non-Credit Options

Course Credit Status (CB04)

Credit - Degree Applicable

Course Non Credit Category (CB22)

Credit Course.

Non-Credit Characteristic

No Value

Course Classification Code (CB11)

Funding Agency Category (CB23)

☐ Cooperative Work Experience Education Status (CB10)

Credit Course.	Not Applicable.

☐ Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	1.5	3
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	27
Laboratory	0
Activity	0
Total	27

Course Out-of-Class Hours

Lecture	54
Laboratory	0
Activity	0
Total	54

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity	Type	In Class	Out of
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85A - Foundations in Academic Litera

OR ENGL-85AC OR ENGL-85E

AND

Prerequisite

FIRE68B - Basic Incident Command System (I-200)

Entrance Skills

Entrance	Descriptio
No value	No value

Limitations on Enrollment

Limitations on	Descriptio
No value	No value

Specifications

Methods of Instruction	Lecture
Rational	No value
Methods of	Demonstration
Rational	No value
Methods of	Other
Rational	Other - Videos and/or slides
Methods of	Other
Rational	Other - Role playing

Assignments

READING
1. Handouts

WRITING
1. Complete student information sheets
2. Complete student notebooks

OUTSIDE
1. Read, review and study handouts
CRITICAL THINKING
1. Given scenario situations the student, through oral presentations, will identify the general duties of each organizational element, the terminology utilized, staffing considerations, and reporting relationships when organized under the Incident Command System (ICS).
2. In an oral and written presentation, the student will explain how to set up an effective organizational specialty areas to support incidents.

Methods of Evaluation	Rationale
Other	Other - Class assignments
Other	Other - Testing

Equipment
No Value

Textbooks

Author	Title	Publisher	Date	ISBN
State Fire Marshal, California	ICS 300	California State Fire Marshal	2013	

Other Instructional Materials

Description	Instructor prepared handout materials as approved by the certifying body
Author	Incident Command System - Intermediate (I-300)

Materials Fee

Learning Outcomes and Objectives

Course

A. Describe the incident/event management process for supervisors and expanding incidents as described by the Incident Command System (ICS).

B. Implement the incident management process on a simulated expanding incident.

C. Develop an Incident Action Plan for a simulated incident.

CSLOs

Analyze the principles of organization and staffing in Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.

Computation - Use mathematical skills and various aspects of technology appropriate to the task

Inventory components of organizing for incidents and Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.

Computation - Use mathematical skills and various aspects of technology appropriate to the task

Examine the role of incident resources Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.

Computation - Use mathematical skills and various aspects of technology appropriate to the task

Outline

Course Outline

I. Organization and Staffing

- A. Responsibilities of organizational elements in each section of the ICS
- B. General duties of each organizational elements
  1. Terminology
  2. Staffing considerations
  3. Reporting relationships

II. Organizing for Incidents or Events

- A. Manner in which incidents and events are organized to ensure achieving objectives
- B. Steps in organizational development
- C. Incident briefing
- D. Reporting information and forms

III. Resource management process at an incident

- A. Resource management
  1. Responsibilities related to resource ordering
  2. Use of Operational Planning Worksheet
- B. Importance of Staging Areas
- C. Demobilization of Resources
- D. Cost-effective resource management

IV. Air Operations Branch

- A. Description
- B. How to set up an effective aviation organization

V. Incident and Event Planning

A. Planning process
B. Development of incident objectives, strategies and tactics
C. Use of operational periods
D. Planning meetings
E. Major steps and personnel involved in planning
F. Support plans
    1. Communications
    2. Medical
    3. Traffic
    4. Incident Action Plan Forms

DE Addendum Revisions

Response #1: Explain how time and/or distance will separate the instructor and students. Definition and Application as defined by Title5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

- lecture and all outside activities fully online

Specify "Other" here:

No Value

Response #2: Explain how the instructor will distribute the required number of unit hours per week using technology. Definition andApplication as defined by Title 5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

- lecture video
- discussion board activities
- quiz activities
- supplemental instructional video, such as YouTube, TedTalks, and PBS

Specify "Other" here:

No Value

Response #3: Explain how the instructor will meet ADA requirements in designing this course. Course Quality Standards as defined byTitle 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply)

- work with the College Instructional Designer
- work with the College ADA specialist
- work with the local POCR Team
- receive a 'Badge' from the CVC-OEI Design Academy
- utilize a 'Blueprint' course

Response #4: Explain how the instructor's course will meet the same quality standards as an in-person counterpart. Course Quality Standards as defined by Title 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply) - The online coursewill offer:

- weekly lectures
- discussion opportunities between students weekly
- student-to-student activities such as group work
- regular assessment: both formative and summative
- regular feedback weekly
- re-teaching opportunities

Specify "Other" for Response #3 here:

No Value

Specify "Other" for Response #4 here:

No Value

Response #5: Explain how the instructor will conduct regular and effective contact between the instructor and students. Please includethe time frame parameters. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – select all that apply)

- pre-class 'Welcome Letter'
- weekly lectures
- weekly announcement using the LMS (Canvas)
- online orientation – non-mandatory
- timely feedback within the LMS (Canvas) – within 72-hours of the due date
- midterm and end-of-course surveys
- College email – respond within 24-hours M-F
- LMS (Canvas) email – respond within 24-hours M-F
- periodic online review/study sessions – non-mandatory
- periodic online workshops – non-mandatory

Specify "Other" here:

No Value

Response #6: Explain how the instructor will promote regular and effective contact among students either synchronously or asynchronously. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – selectall that apply)

- weekly discussion boards – robust posts and replies
- LMC (Canvas) email

Specify "Other" here:

No Value

Response #7: This course will strive to meet the quality standards for alignment at 100% as set forth in the CVC-OEI Rubric in one or more of the following ways. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-down menu

– select all that apply)

- The instructor has conducted a self-assessment of the CVC-OEI Rubric.
- The instructor will be using a 'Blueprint' course created by Merced College.

Specify "Other" here:

No Value

Response #8: The following parties will be responsible to ensure the portion of instruction delivered via distance education meetsregular and effective contact. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-downmenu – select all that apply)

- Dean of the Cohort/Department
- Faculty teaching the course

Specify "Other" here:

Response #9: The College has identified the instructor as prepared to teach in a distance, education delivery method consistent withlocal district policies and negotiated agreements in the following ways. Faculty Selection and Workload as defined by Title 5 Section55208. (Possible Responses in the pull-down menu – select all that apply)

- other (specify in comment box)

Specify "Other" here:

Response #10: Explain the process the department faculty used to determine this course was a good fit for online delivery. FacultySelection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu – select all that apply)

Specify "Other" here:

Response #11: The Dean of the discipline supports this course as a good fit for online delivery. Faculty Selection and Workload asdefined by Title 5 Section 55208. (Possible Responses in the pull-down menu)

- Yes

Exhibit N

Merced College
Course Outline of Record Report
06/28/2022

FIRE68D : Advanced Incident Command System (I-400)

General Information

Author:	• Gabriela Garcia
Course Code (CB01) :	FIRE68D
Course Title (CB02) :	Advanced Incident Command System (I-400)
Cohort:	Fire Technology
Proposal Start:	2019U
TOP Code (CB03) :	No value
CIP Code:	No value
SAM Code (CB09) :	No value
Distance Education Approved:	Yes
Course Control Number (CB00) :	No value
Curriculum Committee Approval Date:	11/03/2016
Board of Trustees Approval Date:	04/05/2011
External Review Approval Date:	Pending
Course Description:	This is an advanced course in the Incident Command System. This course is designed for senior personnel who are expected to perform in a management capacity in an Area Command or multiagency coordination system. This course is designed to provide overall incident management skills rather than tactical expertise.
Submission Rationale:	No value
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Fire Technology
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)

No value

Course Special Class Status (CB13)

No value

Grade Options

- Letter Grade Methods
- Pass/No Pass

☐ Allow students to gain Credit for Prior Learning (CPL)

Allowed Number of Retakes

Course Prior To College Level (CB21)

0

No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

☐ Course is part of a program (CB24)

Associated Program	Award Type	Active
No value	No value	

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)	Transferability Status
Not transferable	Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07) 2

Maximum Credit Units (CB06) 2

Total Course In-Class (Contact) Hours 36

Total Course Out-of-Class Hours 72

Total Student Learning Hours 108

Faculty Load 0

Credit / Non-Credit Options

Course Credit Status (CB04)	Course Non Credit Category (CB22)	Non-Credit Characteristic
Credit - Degree Applicable	Credit Course.	No Value

Course Classification Code (CB11)
Credit Course.

Funding Agency Category (CB23)
No value

☐ Cooperative Work Experience Education Status (CB10)

☐ Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	2	4
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	36
Laboratory	0
Activity	0
Total	36

Course Out-of-Class Hours

Lecture	72
Laboratory	0
Activity	0
Total	72

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85A - Foundations in Academic Litera

OR ENGL-85AC OR ENGL-85E **Objectives**

- A1. Make connections between course readings and prior knowledge.
- A4. Annotate a variety of texts to identify thesis, primary support, and other rhetorical features.
- C. Apply, at the pre-transfer level, critical thinking strategies of summary, analysis, evaluation, and synthesis to engage with the ideas of

texts.

Outcomes

- Use the reading process, at the pre-transfer level, to access a variety of texts.
- Apply, at the pre-transfer level, critical thinking strategies, such as summary, analysis, evaluation, and synthesis, to engage in both the reading and writing process.

AND

Prerequisite

FIRE68C - Incident Command System

Objectives

- A. Describe the incident/event management process for supervisors and expanding incidents as described by the Incident Command System (ICS).
- B. Implement the incident management process on a simulated expanding incident.
- C. Develop an Incident Action Plan for a simulated incident.

Outcomes

- Analyze the principles of organization and staffing in ICS.
- Inventory components of organizing for incidents and events.
- Examine the role of incident resources management.

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
No value	No value

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Rationale	No value
Methods of Instruction	Other
Rationale	Other - Films and/or videotapes

Methods of Instruction	Class Discussion
Rationale	No value

Methods of Instruction	Other
Rationale	Other - Scenario exercises

Assignments

READING
1. Text
WRITING
1. Topic papers
OUTSIDE
1. Handout reading assignments
CRITICAL THINKING
1. The student will develop an ICS Command and General organization structure around a simulated scenario.
2. Given a scenario, develop the proper organizational structure for unified command at an incident.
3. Given an simulated incident, such as an earthquake or tornado, student groups will examine how separate incidents could be brought into a single ICS management system and create an Incident Complex structure.
4. Given a series critical situations, student groups will develop an ICS action plan including command structure, authority to act, and allocation of limited resources.

Methods of Evaluation	Rationale
Other	Other - Skill Tests
Papers	No value
Class Participation	No value

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
No Value	No Value	No Value	No Value	No Value

Other Instructional Materials

Description	Current Instructor handouts for National Wildfire Coordinating Group (NWCG) material for ICS 400
Author	
Citation	Advanced Incident Command System (I-400)

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

No value

CSLOs

Summarize principal responsibilities for each Command, General Staff, and Liaison member. Expected SLO Performance: 70.0

ISLOs Core ISLOs
- Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
- Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.
- Computation - Use mathematical skills and various aspects of technology appropriate to the task

Define situations which neccesitate the use of a Unified Command structure. Expected SLO Performance: 70.0

ISLOs Core ISLOs
- Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
- Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.
- Computation - Use mathematical skills and various aspects of technology appropriate to the task
- Global & Community Consciousness and Responsibility - Demonstrate an understanding of different cultures and knowledge of historical eras and the important of community involvement

Examine the principal factors often found in, or related to, major and/or complex incidents. Expected SLO Performance: 70.0

ISLOs Core ISLOs
- Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
- Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.
- Computation - Use mathematical skills and various aspects of technology appropriate to the task

Distinguish differences between area command, unified command, multi-agency coordination systems, and emergency operations centers. Expected SLO Performance: 70.0

ISLOs Core ISLOs
- Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
- Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.
- Computation - Use mathematical skills and various aspects of technology appropriate to the task
- Global & Community Consciousness and Responsibility - Demonstrate an understanding of different cultures and knowledge of historical eras and the important of community involvement

Outline

Course Outline

I. Command and General Staff

A. Background related to command and general staff development
1. A standardized functional organization established
2. Related functions grouped within the organization
3. Subordinates within the organization delegated the necessary authority to manage their assigned functions
4. Every incident, small or large, simple or complex, must have some form of an action plan whether oral or written

B. Determination of command and general staff functions
1. Line and staff organizations
2. Command and general staff titles

C. Major responsibilities of command and general staff positions
1. Responsibilities of Incident Commander
2. ICS general staff positions
3. Command staff

D. Agency representatives

II. Unified Command

A. Background of unified command
1. Dividing the incident either geographically or functionally
2. Creating a single ICS incident structure with a built-in-process for an effective and responsible multi-jurisdictional or multi-agency approach

B. Description of unified command
1. Policies, objectives, strategies
2. Organization
3. Resources
4. Operations

C. Advantages of using unified command

D. Applications
1. Incidents that impact more than one political jurisdiction
2. Incidents involving multiple agencies (or departments) within the same political jurisdiction
3. Incidents that impact on (or involve) several political and functional agencies

E. Primary features of a unified command organization
1. A single integrated incident organization
2. Collocated (shared) facilities
3. A single planning process and incident action plan
4. Shared planning, logistical, and finance sections
5. Unified command resource ordering

F. Guidelines for the use of unified command
1. Understand ICS unified command
2. Collocate essential functions
3. Implement unified command at an early stage of multi-jurisdictional or multi-agency incident
4. Concur on an operations section chief and other general staff members
5. If necessary, designate one of the incident commanders to be a spokesperson (operational period duty officer)
6. Train often as a team

G. Functioning in unified command
1. Clarity on jurisdictional or agency limitations
2. Authorization to perform certain activities and actions on behalf of the jurisdiction or agency they represent
3. Unified command has the responsibility to manage the incident to the best of its abilities
4. Members of the united command function together as a team

III. Major Incident Management

A. Problems in major or complex incident management
1. They start as major incidents
2. They become major incidents

B. Characteristics of major/complex incidents

C. Major incident management organizations
1. Incident complex - multiple incident, management with a single ICS organization
2. Dividing a single incident into two incidents
3. Expanding the ICS planning capability for incidents
4. Expanding the ICS organization to accommodate another operations section or logistics section

IV. Area Command

A. Definition
1. Description of area command
2. Terminology related to area command
3. Responsibility

4. Reporting relationships

B. The use of area command
   1. The need for area command
   2. Establishing area command
   3. The location for area command

C. Primary functions of area command
   1. Provide effective agency or jurisdictional management authority for assigned incidents
   2. Ensuring that incident commanders have a clear understanding of agency expectations, intentions, and constraints related to the incidents
   3. Establishing priorities among various incidents based on incident needs and agency policy and direction
   4. Ensuring that incident management teams personnel assignments and organizations are appropriate to the kind and complexity of the incidents involved
   5. Maintain liaison with officials in charge, assisting and cooperating agencies, and other interested groups

D. Area Command Primary Function Responsibilities
   1. Area Commander (Unified Area Command)
   2. Area command planning chief
   3. Area command logistics chief

DE Addendum Revisions

Response #1: Explain how time and/or distance will separate the instructor and students. Definition and Application as defined by Title 5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

- lecture and all outside activities fully online

Specify "Other" here:

No Value

Response #2: Explain how the instructor will distribute the required number of unit hours per week using technology. Definition and Application as defined by Title 5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

- lecture video
- discussion board activities
- quiz activities
- supplemental instructional video, such as YouTube, TedTalks, and PBS

Specify "Other" here:

No Value

Response #3: Explain how the instructor will meet ADA requirements in designing this course. Course Quality Standards as defined by Title 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply)

- work with the College Instructional Designer
- work with the College ADA specialist
- work with the local POCR Team
- receive a 'Badge' from the CVC-OEI Design Academy
- utilize a 'Blueprint' course

Response #4: Explain how the instructor's course will meet the same quality standards as an in-person counterpart. Course Quality Standards as defined by Title 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply) • The online course will offer:

- weekly lectures
- discussion opportunities between students weekly

- student-to-student activities such as group work
- regular assessment: both formative and summative
- regular feedback weekly
- re-teaching opportunities

Specify "Other" for Response #3 here:

No Value

Specify "Other" for Response #4 here:

No Value

Response #5: Explain how the instructor will conduct regular and effective contact between the instructor and students. Please include the time frame parameters. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – select all that apply)

- pre-class 'Welcome Letter'
- weekly lectures
- weekly announcement using the LMS (Canvas)
- online orientation – non-mandatory
- timely feedback within the LMS (Canvas) – within 72-hours of the due date
- midterm and end-of-course surveys
- College email – respond within 24-hours M-F
- LMS (Canvas) email – respond within 24-hours M-F
- periodic online review/study sessions – non-mandatory
- periodic online workshops – non-mandatory

Specify "Other" here:

No Value

Response #6: Explain how the instructor will promote regular and effective contact among students either synchronously or asynchronously. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – select all that apply)

- weekly discussion boards – robust posts and replies
- LMC (Canvas) email

Specify "Other" here:

No Value

Response #7: This course will strive to meet the quality standards for alignment at 100% as set forth in the CVC-OEI Rubric in one or more of the following ways. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-down menu – select all that apply)

- The instructor has conducted a self-assessment of the CVC-OEI Rubric.
- The instructor will be using a 'Blueprint' course created by Merced College.

Specify "Other" here:

No Value

Response #8: The following parties will be responsible to ensure the portion of instruction delivered via distance education meets regular and effective contact. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-down

menu – select all that apply)

- Dean of the Cohort/Department
- Faculty teaching the course

Specify "Other" here:

No Value

Response #9: The College has identified the instructor as prepared to teach in a distance, education delivery method consistent with local district policies and negotiated agreements in the following ways. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu – select all that apply)

- other (specify in comment box)

Specify "Other" here:

None completed yet

Response #10: Explain the process the department faculty used to determine this course was a good fit for online delivery. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu – select all that apply)

- department discussions on approving DE for this course (specify date(s) in comment box)

Specify "Other" here:

4/25/20

Response #11: The Dean of the discipline supports this course as a good fit for online delivery. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu)

- Yes

Exhibit O

Merced College
Course Outline of Record Report
06/28/2022

FIRE69A : First Responder Medical

General Information

Author:	• Bryan Donnelly
Course Code (CB01) :	FIRE69A
Course Title (CB02) :	First Responder Medical
Cohort:	Fire Technology
Proposal Start:	2020U
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	Clearly Occupational
Distance Education Approved:	No
Course Control Number (CB00) :	CCC000550514
Curriculum Committee Approval Date:	09/05/2019
Board of Trustees Approval Date:	10/08/2019
External Review Approval Date:	Pending
Course Description:	This course is designed to meet the state requirements for emergency medical personnel. The course relates to patient assessment, cardiovascular systems, fractures, splinting, childbirth and environmental emergencies.
Submission Rationale:	Mandatory Revision 6yr. CTE Review
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Fire Technology
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Learning (CPL)

0

No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

☐ Course is part of a program (CB24)

Associated Program

No value

Award Type

No value

Active

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07) 2.5

Maximum Credit Units (CB06) 2.5

Total Course In-Class (Contact) Hours 45

Total Course Out-of-Class Hours 90

Total Student Learning Hours 135

Course Classification Code (CB11)

Credit Course.

Funding Agency Category (CB23)

Not Applicable.

Cooperative Work Experience Education Status (CB10)

☐ Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	2.5	5
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	45
Laboratory	0
Activity	0
Total	45

Course Out-of-Class Hours

Lecture	90
Laboratory	0
Activity	0
Total	90

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

- C. Apply, at the pre-transfer level, critical thinking strategies of summary, analysis, evaluation, and synthesis to engage with the ideas of texts.
- C2. Analyze texts to determine authors' modes of discourse, patterns of organization, and other rhetorical features.
- C3. Synthesize the ideas of several academic texts in order to construct original thoughts.

Outcomes

- Use the reading process, at the pre-transfer level, to access a variety of texts.
- Apply, at the pre-transfer level, critical thinking strategies, such as summary, analysis, evaluation, and synthesis, to engage in both the reading and writing process.

AND

Prerequisite

FIRE30 - Fire Protection Organization

Or currently a paid call, seasonal, or full-time firefighter **Outcomes**

- Examine fire fighting strategy and tactics using the types of common fire department apparatus, equipment, and personal safety equipment, at a basic level.

AND

Advisory

ENGL85AC - Accelerated Foundations in Academic Literacy

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
No value	No value

Specifications

Methods of Instruction

Methods of Instruction	Lecture

Rationale	Other - Problem Solving
Methods of Instruction	Other
Rationale	Other - Role playing
Methods of Instruction	Other
Rationale	Other - Videos and slides

Assignments

READING
1. Handouts

WRITING
1. Complete student information sheets
2. Complete student notebooks

OUTSIDE
1. Read, review and study handouts
2. Practice manipulative skills

CRITICAL THINKING
1. Given multiple medical scenarios the student will physically and orally demonstrate the evaluation and assessment of patient status and treatment.
2. Given multiple traumatic scenarios the student will physically and orally demonstrate evaluation and assessment and patient treatment.
3. The student will orally and by written assignment identify the need for the proper involvement of different EMS system components for proper patient care and outcome.

Methods of Evaluation	Rationale
Other	Other - Comprehensive examinations
Other	Other - Manipulative skills testing

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
Le Baudour, Christopher;& Bergeron, David	Emergency Medical Responder	Pearson	2012	

Citation First Responder Medical

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

Prepare the student to assess and treat victims of medical and traumatic emergencies.

CSLOs

Identify anatomical position, match body functions with body systems, major respiratory system organs, layers of skin, abdominal quadrants, major bones of upper and lower extremities, arterial and venous bleeding. Expected SLO Performance: 70.0

ISLOs Core ISLOs
- Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
- Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.
- Personal Development and Life-Long Learning - Demonstrate self-management, maturity and growth through practices that promote physical, mental and emotional well being.

Use the signs and symptoms of traumatic injuries to assess injuries and specify appropriate treatment. Expected SLO Performance: 70.0

ISLOs Core ISLOs
- Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
- Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.
- Personal Development and Life-Long Learning - Demonstrate self-management, maturity and growth through practices that promote physical, mental and emotional well being.

Recognize special problems when identifying and treating pediatric trauma and medical patients. Expected SLO Performance: 70.0

ISLOs Core ISLOs
- Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Outline

Course Outline

I. EMS system

2. Posterior
3. Midline
4. Midclavicular
5. Midaxillary

B. Directional Terms
1. Right and left
2. Superior and inferior
3. Lateral and medial
4. Proximal and distal

C. Anatomical Positions
1. Prone and supine
2. Flower's position
3. Trendelenburg's position
4. Shock position

D. Skeletal system
E. Musculoskeletal system
F. Body functions and body systems
G. Respiratory system
1. Upper Airway
2. Lower Airway
3. Lungs
4. Diaphragm
5. Respiratory physiology
a. Characteristics of normal breathing
(1) normal rate and depth
(2) regular rhythm or pattern of inhalation and exhalation
(3) good audible breath sounds on both sides of chest
(4) regular rise and fall movement on both sides of chest
(5) movement of abdomen
b. Inadequate breathing patterns in adults

H. Circulatory system
1. Heart
a. How it works
b. Normal heartbeat
c. Electrical conduction system
2. Arteries
3. Capillaries
4. Veins
5. Blood components
6. Physiology of circulatory system
a. Normal circulation in adults
b. Inadequate circulation in adults

I. Nervous system
1. Central nervous system
2. Peripheral nervous system

J. Skin
1. Functions
2. Anatomy

K. Endocrine system
L. Digestive system
M. Urinary system
N. Genital system

III. Initial Assessment/Patient evaluation

A. Size-up of an incident scene
B. Primary and secondary survey of a patient
1. Baseline vital signs and history
2. AVPU scale
3. Reassessment of vital signs

A. Establishing an Airway
B. Cleaning the airway
    1. Flow-restricted, oxygen-powered ventilation device
    2. Using airway adjuncts
    3. Suction and suction devices
C. Artificial Respiration
    1. Mouth-to-mask ventilation
    2. Bag-valve mask
    3. Mouth-nose
    4. Mouth-to stoma
D. Artificial Circulation
    1. Proper Positioning
        a. Victim
        b. Rescuer
    2. Chest compressions
        a. Rate
        b. Rhythm
        c. Depth
E. Two-person Rescue
    1. Rate and rhythm
    2. Changeover
    3. Monitoring
F. Child birth
    1. Positioning mother
    2. Assisting birth
    3. Infant care

VI. Trauma/Bandaging

A. Eight basic groups of trauma i.e.
    1. Soft tissue injuries
    2. Head injuries
    3. Brain injuries
    4. Chest injuries
    5. Genitourinary
    6. Shock
B. Bandaging techniques for various head, eye, and extremity injuries

VII. Lifting and moving patients

VIII. Medical emergencies

A. Chest pain
B. Conscious state,
C. Respiratory distress
D. Stroke
E. Seizures
F. Drug abuse

IX. Oxygen Therapy and adjuncts

A. Hypoxia, apnea
B. Oxygen hazards
C. Correct oxygen therapy
D. Airways
    1. Oropharyngeal
    2. Nasal pharyngeal
    3. Oxygen masks
    4. Cannulas
E. Resuscitators
F. Portable suction units
G. Bag valve masks

Exhibit P

Merced College
Course Outline of Record Report
06/28/2022

FIRE69B : First Responder Re-Certification

General Information

Author:	- Bryan Donnelly
Course Code (CB01) :	FIRE69B
Course Title (CB02) :	First Responder Re-Certification
Cohort:	Fire Technology
Proposal Start:	2019U
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	Clearly Occupational
Distance Education Approved:	No
Course Control Number (CB00) :	CCC000461377
Curriculum Committee Approval Date:	11/03/2016
Board of Trustees Approval Date:	04/02/2013
External Review Approval Date:	02/21/2013
Course Description:	This course is designed to meet the state re-certification requirements for emergency medical personnel. The course relates to patient assessment, cardio-vascular systems, fractures, splinting, childbirth and environmental emergencies. Must possess a current valid C.P.R. card in Basic Life Support of Health Care Providers.
Submission Rationale:	Mandatory Revision CTE 2 year review
Author:	No value

Faculty Requirements

Master Discipline Preferred:	- Fire Technology
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Letter Grade Methods
- Pass/No Pass

☐ Allow students to gain Credit for Prior Learning (CPL)

Allowed Number of Retakes

0

Course Prior To College Level (CB21)

No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

☐ Course is part of a program (CB24)

Associated Program

No value

Award Type

No value

Active

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07) 1.5

Maximum Credit Units (CB06) 1.5

Total Course In-Class (Contact) Hours	27
Total Course Out-of-Class Hours	54
Total Student Learning Hours	81
Faculty Load	0

Credit / Non-Credit Options

Course Credit Status (CB04)
Credit - Degree Applicable

Course Non Credit Category (CB22)
Credit Course.

Non-Credit Characteristic
No Value

Course Classification Code (CB11)
Credit Course.

☐ Variable Credit Course

Funding Agency Category (CB23)
Not Applicable.

☐ Cooperative Work Experience Education Status (CB10)

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	1.5	3
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	27
Laboratory	0
Activity	0
Total	27

Course Out-of-Class Hours

Lecture	54
Laboratory	0
Activity	0
Total	54

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85A - Foundations in Academic Litera

OR ENGL-85AC OR ENGL-85E **Objectives**

- A. Use the reading process, at the pre-transfer level, to access a variety of texts.
- A3. Demonstrate competence in researching background information using, for example, internet searches and library databases.
- C. Apply, at the pre-transfer level, critical thinking strategies of summary, analysis, evaluation, and synthesis to engage with the ideas of texts.

Outcomes

- Use the reading process, at the pre-transfer level, to access a variety of texts.
- Apply, at the pre-transfer level, critical thinking strategies, such as summary, analysis, evaluation, and synthesis, to engage in both the reading and writing process.

AND

Prerequisite

FIRE69A - First Responder Medical

Outcomes

- Examine the emergency medical service system, its function and legalities.
- Inspect and identify anatomical position, match body functions with body systems, major respiratory system organs, layers of skin, abdominal quadrants, major bones of upper and lower extremities, arterial and venous bleeding.
- Use the signs and symptoms of traumatic injuries to assess injuries and specify appropriate treatment.
- Assess symptoms and assign treatment for medical emergencies.
- Assess and perform proper techniques associated with normal and high risk obstetrical emergencies.
- Recognize special problems when identifying and treating pediatric trauma and medical patients.

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
Must possess a current valid CPR card in Basic Life Support of Health Care Providers (or equivalent) as outlined by the American Heart Association.	No Value

Specifications

Methods of Instruction

Methods of Instruction	Lecture

Rationale	No value
Methods of Instruction	Other
Rationale	Other - Problem Solving
Methods of Instruction	Other
Rationale	Other - Role playing
Methods of Instruction	Other
Rationale	Other - Videos and slides

Assignments

READING
1. Handouts
WRITING
1. Complete student information sheets
2. Complete student notebooks
OUTSIDE-
1. Read, review and study handouts
2. Practice manipulative skills
CRITICAL THINKING
1. The student will evaluate and assess patient status through scenarios.
2. The student will demonstrate proper treatment of ill or injured victims through scenarios.

Methods of Evaluation	Rationale
Other	Other - Comprehensive examinations
Other	Other - Manipulative skills testing

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
AAOS	Emergency Medical Responder	Jones and Bartlett	2012	

Other Instructional Materials

No Value

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

No value

CSLOs

Evaluate the emergency medical service system, its function and legalities. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Categorize anatomical position, match body functions with body systems, major respiratory system organs, layers of skin, abdominal quadrants, major bones of upper and lower extremities, arterial and venous bleeding. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Evaluate the signs and symptoms of traumatic injuries and specify appropriate treatment. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs
Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.
Computation - Use mathematical skills and various aspects of technology appropriate to the task

Evaluate symptoms and treatment for medical emergencies. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs
Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.
Computation - Use mathematical skills and various aspects of technology appropriate to the task

Differentiate, select and perform proper treatment techniques for normal and high risk obstetrical emergencies. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs
Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.
Computation - Use mathematical skills and various aspects of technology appropriate to the task

Outline

Course Outline

I. Review of EMS System

A. Medical-legal aspects, i.e., duty to act, consent, good Samaritan

II. Review of Anatomy/Physiology

A. Anatomical position
B. Match body functions with body systems
C. Major organs in the respiratory system
D. Layers of skin
E. Abdominal quadrants
F. Major bones of upper and lower extremities
G. Arterial and venous bleeding, control of bleeding
H. Define and apply specific terms, i.e., posterior, midline, superior

III. Review of Initial Assessment/Patient Evaluation

A. Size-up of an incident scene
B. Primary and secondary survey of a patient

IV. Review of Diagnostic Signs

A. Pulse, respirations, blood pressure

V. Review of Trauma/Bandaging

A. Eight basic groups of trauma i.e.
    1. Soft tissue injuries
    2. Head injuries
    3. Brain injuries
    4. Chest injuries
    5. Genitourinary
    6. Shock
B. Bandaging techniques for various head, eye, and extremity injuries

VI. Review of Medical emergencies

A. Chest pain
B. Conscious state,
C. Respiratory distress
D. Stroke
E. Seizures
F. Drug abuse

VII. Review of Oxygen Therapy and adjuncts

A. Hypoxia, apnea
B. Oxygen hazards
C. Correct oxygen therapy
D. Airways
    1. Oropharyngeal
    2. Nasal pharyngeal
    3. Oxygen masks
    4. Cannulas
E. Resuscitators
F. Portable suction units
G. Bag valve masks

Exhibit Q

Merced College
Course Outline of Record Report
06/28/2022

FIRE71A : Fire Instructor I

General Information

Author: • Bryan Donnelly

Course Code (CB01) : FIRE71A

Course Title (CB02) : Fire Instructor I

Cohort: Fire Technology

Proposal Start: 2019U

TOP Code (CB03) : (2133.00) Fire Technology

CIP Code: (43.0201) Fire Prevention and Safety Technology/Technician

SAM Code (CB09) : Advanced Occupational

Distance Education Approved: No

Course Control Number (CB00) : CCC000526282

Curriculum Committee Approval Date: 11/20/2014

Board of Trustees Approval Date: 04/05/2011

External Review Approval Date: 02/07/2013

Course Description: This course is designed for the fire company officer who conducts in-service training programs. The course provides a variety of methods and techniques to help personnel select, develop and organize material for in-service programs. Methods of evaluation and opportunity to apply the major principles of learning through demonstrations are stressed. The course is certified by the office of the California State Fire Marshal.

Submission Rationale: Mandatory Revision

CTE 2 year review

Author: No value

Faculty Requirements

Master Discipline Preferred: • Fire Technology

Alternate Master Discipline Preferred: No value

Bachelors or Associates Discipline Preferred: No value

Additional Bachelors or Associates Discipline Preferred: No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Letter Grade Methods
- Pass/No Pass

☐ Allow students to gain Credit for Prior Learning (CPL)

Allowed Number of Retakes

0

Course Prior To College Level (CB21)

No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

Course is part of a program (CB24)

Associated Program	Award Type	Active
Fire Technology (CT)	Certificate of Achievement (16+ units)	2018U

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07) 2.25

Maximum Credit Units (CB06) 2.25

Total Course In-Class (Contact) Hours 40.5

Total Course Out-of-Class Hours 81

Total Student Learning Hours 121.5

Faculty Load 0

Credit / Non-Credit Options

Course Credit Status (CB04)

Course Non Credit Category (CB22)

Non-Credit Characteristic

Credit - Degree Applicable	Credit Course.	No Value

Course Classification Code (CB11)
Credit Course.

Funding Agency Category (CB23)
Not Applicable.

Cooperative Work Experience Education Status (CB10)

☐ Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	2.25	4.5
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	40.5
Laboratory	0
Activity	0
Total	40.5

Course Out-of-Class Hours

Lecture	81
Laboratory	0
Activity	0
Total	81

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85A - Foundations in Academic Litera

OR ENGL-85AC OR ENGL-85E **Objectives**

- A1. Make connections between course readings and prior knowledge.
- A4. Annotate a variety of texts to identify thesis, primary support, and other rhetorical features.
- C. Apply, at the pre-transfer level, critical thinking strategies of summary, analysis, evaluation, and synthesis to engage with the ideas of texts.

Outcomes

- Use the reading process, at the pre-transfer level, to access a variety of texts.
- Apply, at the pre-transfer level, critical thinking strategies, such as summary, analysis, evaluation, and synthesis, to engage in both the reading and writing process.

AND

Prerequisite

FIRE30 - Fire Protection Organization

Or current volunteer, paid call, or seasonal or full-time firefighter for a certified fire protection department **Outcomes**

- Distinguish between the educational requirements, duties, and information sources for various occupations in fire protection.
- Categorize the basic components of a fire as a chemical reaction, the major phases of fire, and the main factors that influence fire spread and fire behavior, and its effects on environment, at a basic level.
- Identify the various types of public and private fire protection equipment and systems and describe the purpose and scope of their activities, at a basic level.
- Examine fire fighting strategy and tactics using the types of common fire department apparatus, equipment, and personal safety equipment, at a basic level.

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
No value	No value

Specifications

Methods of Instruction

Methods of Instruction	Lecture

Rationale	No value
Methods of Instruction	Demonstration
Rationale	No value
Methods of Instruction	Other
Rationale	Other - Video
Methods of Instruction	Other
Rationale	Other - Role-playing

Assignments

READING
1. Text
2. Handouts

WRITING
1. Prepare lessons plans
2. Complete performance objectives
3. Prepare course outlines
4. Complete an occupational analysis

OUTSIDE
1. Preparation of lesson plans
2. Preparation of practice teaching demonstrations
3. Reading and reviewing student handouts

CRITICAL THINKING
1. The student will be required to analyze, evaluate, and demonstrate the ability to present a well-organized teaching demonstration.
2. The student will be required to prepare a lesson plan, and present and evaluate the presentation of the prepared materials as well as the presentations of other students.

Methods of Evaluation	Rationale
Class Participation	No value
Exams/Tests	No value
Other	Other - Written assignments
Other	Other - Demonstration

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN

Reeder, Forest F	Fire Service Instructor: Principles and Practice	Jones and Bartlet	2014
IFSTA	Fire and Emergency Service Instructor	International Fire Service Training Association (IFSTA)	2012
California State Fire Marshal	Training Instructor 1A-Cognitive Lesson Delivery	California State Fire Marshal	01-01-2010

Other Instructional Materials

No Value

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

A. Succesfully meet the requirements for certification as described by the California State Fire Marshal Office.

CSLOs

Examine a variety of methods and techniques for training students in accordance with the latest concepts in vocational education.

Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
	Demonstrate effective verbal and nonverbal communication skills.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
	Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.
	Computation - Use mathematical skills and various aspects of technology appropriate to the task

Describe instructional materials appropriate for teaching manipulative lessons.

Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
	Demonstrate effective verbal and nonverbal communication skills.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
	Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.
	Computation - Use mathematical skills and various aspects of technology appropriate to the task

Apply major principles of learning through practice teaching demonstrations. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
	Demonstrate effective verbal and nonverbal communication skills.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
	Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.
	Computation - Use mathematical skills and various aspects of technology appropriate to the task

Outline

Course Outline

I. Orientation and Administrative Details

II. Reasons for Fire Instructor 1A

III. Methodology

- A. Utilization of the occupational analysis
- B. Development of a course outline
- C. Procedures used for the completion of a job breakdown
- D. Identification of instructional terms
- E. Concepts of leaning
- F. Introduction to levels of instruction
- G. Construction of behavior objectives
- H. Manipulative lesson planning
- I. Qualities of a good instructor
- J. Introduction to the psychology of learning
    1. Methods used to evaluate teaching demonstrations
    2. Teaching demonstrations

IV. Impact of EEO and AA

V. The Role and Responsibilities of Instruction

VI. Evaluation of topic and presentation effectiveness

Exhibit R

Merced College
Course Outline of Record Report
06/28/2022

FIRE71B : Fire Instructor II

General Information

Author:	• Bryan Donnelly
Course Code (CB01) :	FIRE71B
Course Title (CB02) :	Fire Instructor II
Cohort:	Fire Technology
Proposal Start:	2019U
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	Advanced Occupational
Distance Education Approved:	No
Course Control Number (CB00) :	CCC000367433
Curriculum Committee Approval Date:	11/17/2016
Board of Trustees Approval Date:	01/18/2005
External Review Approval Date:	11/03/2011
Course Description:	This course is designed for the fire company officer who conducts in-service training programs. The course provides instruction in the use of visual aids, test construction, and teaching demonstrations. The successful completion of this course and the State Fire Marshal's examination will result in State certification.
Submission Rationale:	Mandatory Revision CTE 2 year review
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Fire Technology
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Letter Grade Methods
- Pass/No Pass

☐ Allow students to gain Credit for Prior Learning (CPL)

Allowed Number of Retakes

0

Course Prior To College Level (CB21)

No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

Course is part of a program (CB24)

Associated Program	Award Type	Active
Fire Technology (CT)	Certificate of Achievement (16+ units)	2018U

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07)	2
Maximum Credit Units (CB06)	2
Total Course In-Class (Contact) Hours	36
Total Course Out-of-Class Hours	72
Total Student Learning Hours	108

Faculty Load 0

Credit / Non-Credit Options

Course Credit Status (CB04)

Credit - Degree Applicable

Course Non Credit Category (CB22)

Credit Course.

Non-Credit Characteristic

No Value

Course Classification Code (CB11)

Credit Course.

Variable Credit Course

Funding Agency Category (CB23)

Not Applicable.

☐ Cooperative Work Experience Education Status (CB10)

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	2	4
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours	
Lecture	36
Laboratory	0
Activity	0
Total	36

Course Out-of-Class Hours	
Lecture	72
Laboratory	0
Activity	0
Total	72

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85A - Foundations in Academic Litera

OR ENGL-85AC OR ENGL-85E **Objectives**

- A1. Make connections between course readings and prior knowledge.
- A4. Annotate a variety of texts to identify thesis, primary support, and other rhetorical features.
- C. Apply, at the pre-transfer level, critical thinking strategies of summary, analysis, evaluation, and synthesis to engage with the ideas of texts.

Outcomes

- Use the reading process, at the pre-transfer level, to access a variety of texts.
- Apply, at the pre-transfer level, critical thinking strategies, such as summary, analysis, evaluation, and synthesis, to engage in both the reading and writing process.

AND

Prerequisite

FIRE71A - Fire Instructor I

Outcomes

- Examine a variety of methods and techniques for training students in accordance with the latest concepts in vocational education.
- Describe instructional materials appropriate for teaching manipulative lessons.
- Apply major principles of learning through practice teaching demonstrations.

Objectives

- A. Succesfully meet the requirements for certification as described by the California State Fire Marshal Office.

Outcomes

- Examine a variety of methods and techniques for training students in accordance with the latest concepts in vocational education.
- Describe instructional materials appropriate for teaching manipulative lessons.
- Apply major principles of learning through practice teaching demonstrations.

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
No value	No value

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Rationale	No value
Methods of Instruction	Demonstration
Rationale	No value
Methods of Instruction	Other
Rationale	Other - Video
Methods of Instruction	Other
Rationale	Other - Role-playing

Assignments

READING
1. Text
2. Handouts

WRITING
1. Prepare lessons plans
2. Complete performance objectives
3. Prepare course outlines
4. Complete an occupational analysis

OUTSIDE
1. Preparation of lesson plans
2. Preparation of practice teaching demonstrations
3. Reading and reviewing student handouts

CRITICAL THINKING
1. The student will be required to analyze teaching techniques and learning levels, and construct written lesson plans, tests, and evaluations.
2. The student will evaluate styles of teaching and apply the basic teaching principles to teaching demonstrations.
3. The student will also be required to evaluate the teaching demonstrations of other students.

Methods of Evaluation	Rationale
Class Participation	No value
Exams/Tests	No value
Other	Other - Written assignments
Other	Other - Demonstration

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
-	Fire and Emergency Services Instructor	California Office of the State Fire Marshal	2010	
-	Fire Instructor II Student Supplement	CFSTES	2010	
Reeder, Forrest F	Fire Service Instructor: Principles and Practice	Jones and Bartlet	2014	
IFSTA	Fire and Emergency Services Instructor	IFSTA	2013	9780879394417

Other Instructional Materials

No Value

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

No value

CSLOs

Examine a variety of methods and techniques for training in accordance with the latest concepts in vocational education. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
	Demonstrate an appreciation of lifelong learning.
	Demonstrate effective verbal and nonverbal communication skills.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
	Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.

Prepare instructional materials appropriate for teaching technical lessons. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
	Demonstrate an appreciation of lifelong learning.
	Demonstrate effective verbal and nonverbal communication skills.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
	Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.

Develop various criteria and methods to evaluate teaching and learning efficiency. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
	Demonstrate an appreciation of lifelong learning.
	Demonstrate effective verbal and nonverbal communication skills.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
	Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.
	Computation - Use mathematical skills and various aspects of technology appropriate to the task

Evaluate and apply major principles of learning through practice teaching demonstrations. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
	Demonstrate an appreciation of lifelong learning.
	Demonstrate effective verbal and nonverbal communication skills.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
	Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.
	Computation - Use mathematical skills and various aspects of technology appropriate to the task

Examine the criteria for successfully completing the Fire Officer Certification and Fire Instructor I requirements. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
	Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.
	Computation - Use mathematical skills and various aspects of technology appropriate to the task

Outline

Course Outline

I. Identifying the reasons for the Fire Instructor I-Module B course.

II. Methodology

A. Course outline development

B. Technical lesson plan components
C. Levels of instruction
D. Student behavioral objectives
E. Technical lesson plan development
F. Introduction to instructional aids
G. Utilization of instructional aids
H. Introduction to information and activity sheets
I. Managing the classroom environment
J. Student application techniques
K. Methods of technical lesson plan delivery
L. Introduction to evaluation and testing
M. Utilization of evaluation tools
N. Introduction to test construction
O. Methods used to evaluate teaching demonstrations
    1. Teaching demonstrations
    2. Evaluating teaching demonstrations
P. Administrative details
    1. Quizzes
    2. Daily review
    3. Student assistance

III. Review program and examine objective success.

IV. Certification Exam

Exhibit S

Merced College
Course Outline of Record Report
06/28/2022

FIRE72A : Fire Command I - Module A

General Information

Author:	• Gabriela Garcia
Course Code (CB01) :	FIRE72A
Course Title (CB02) :	Fire Command I - Module A
Cohort:	Fire Technology
Proposal Start:	2019U
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	Advanced Occupational
Distance Education Approved:	Yes
Course Control Number (CB00) :	CCC000345574
Curriculum Committee Approval Date:	11/17/2016
Board of Trustees Approval Date:	11/20/2012
External Review Approval Date:	11/01/2012
Course Description:	This course is designed to provide the fire company officer with information and experience in command and control techniques at the scene of an emergency.
Submission Rationale:	No value
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Fire Technology
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Letter Grade Methods
- Pass/No Pass

☐ Allow students to gain Credit for Prior Learning (CPL)

Allowed Number of Retakes

0

Course Prior To College Level (CB21)

No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

☐ Course is part of a program (CB24)

Associated Program	Award Type	Active
Fire Technology (CT)	Certificate of Achievement (16+ units)	2018U

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07)	2
Maximum Credit Units (CB06)	2
Total Course In-Class (Contact) Hours	40.5
Total Course Out-of-Class Hours	75.96
Total Student Learning Hours	116.46

Faculty Load 0

Credit / Non-Credit Options

Course Credit Status (CB04)
Credit - Degree Applicable

Course Non Credit Category (CB22)
Credit Course.

Non-Credit Characteristic
No Value

Course Classification Code (CB11)
☐ Credit Course.

Funding Agency Category (CB23)
Not Applicable.

☐ Cooperative Work Experience Education Status (CB10)

Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	2.22	4.22
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	40.5
Laboratory	0
Activity	0
Total	40.5

Course Out-of-Class Hours

Lecture	75.96
Laboratory	0
Activity	0
Total	75.96

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Prerequisite

FIRE73A - Fire Inspector 1A

Objectives

- A. The students will learn the responses to a variety of fire prevention situations in a professional and effective manner. B. The student will be prepared as the first-level fire officer to deal with the responsibilities of fire prevention in his/her jurisdiction

Outcomes

- Identify the basic fire prevention functions of a fire department.
- Evaluate occupancies and building preparation and records management in fire prevention efforts.
- Identify principles and procedures used to correct fire hazards.

AND

Prerequisite

FIRE73B - Fire Inspector 1B

Objectives

- A. The student will have an understanding for performing basic fire prevention efforts at the level of company officer and fire prevention personnel. B.The course will prepare first-level fire officers to deal with the responsibilities of fire prevention in his/her jurisdiction.

Outcomes

- Demonstrate an understanding of responsibility for fire prevention inspections and related activities.
- Examine principles and procedures used to correct fire hazards.
- Examine the authority for fire prevention inspections and related activities.

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
No value	No value

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Rationale	No value

Methods of Instruction	Demonstration
Rationale	No value
Methods of Instruction	Other
Rationale	Other - Video
Methods of Instruction	Other
Rationale	Other - Role-playing

Assignments

READING
1. Handouts
WRITING
1. Prepare a tactical response plan for a given emergency situation.
2. Prepare a pre-incident plan for a assigned building.
OUTSIDE
1. Reading and reviewing student handouts
CRITICAL THINKING
1. The student will identify the elements of effective emergency response command.
2. The student will analyze emergency situations relative to resource needs.
3. The student will demonstrate through given scenarios the proper procedures for managing various emergency situations.

Methods of Evaluation	Rationale
Class Participation	No value
Exams/Tests	No value

Equipment

Handouts, student forms and checklists.

Textbooks

Author	Title	Publisher	Date	ISBN
California State Fire Marshal	Fire Command 1A: Command Principles for Company Officers, Student Manual	California State Fire Marshal	01-01-2000	
California State Fire Marshal	Command 1A: Structure Fire Command Operations for the Company Officer – California Edition	Delmar	2011	

Other Instructional Materials

No Value

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

No value

CSLOs

Define at the introductory level human resource management. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
	Global & Community Consciousness and Responsibility - Demonstrate an understanding of different cultures and knowledge of historical eras and the important of community involvement

Analyze the organizational structure used within the fire service, including duties and responsibilities. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Evaluate the communication skills appropriate for reporting on conditions and managing resources at an emergency scene. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
	Demonstrate effective verbal and nonverbal communication skills.
	Demonstrate effective written communication skills.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
	Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.
	Computation - Use mathematical skills and various aspects of technology appropriate to the task
	Global & Community Consciousness and Responsibility - Demonstrate an understanding of different cultures and knowledge of historical eras and the important of community involvement

Design a pre-fire plan in order to utilize that information when responding to an emergency scene. Expected SLO Performance: 70.0

*Fire Technology*At a basic level apply the principles of fire technology.

Fire Technology (CT)	
	Demonstrate effective verbal and nonverbal communication skills.
	Demonstrate effective written communication skills.
ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs	

Identify the methods to size-up emergency situations; and the strategies, tactics and methods necessary to manage those situations.

Expected SLO Performance: 70.0

Fire Technology	At a basic level apply the principles of fire technology.
Fire Technology (CT)	Demonstrate effective verbal and nonverbal communication skills.
	Demonstrate effective written communication skills.
ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs	Global & Community Consciousness and Responsibility - Demonstrate an understanding of different cultures and knowledge of historical eras and the important of community involvement
	Personal Development and Life-Long Learning - Demonstrate self-management, maturity and growth through practices that promote physical, mental and emotional well being.

Outline

Course Outline

I. Introduction to Command
- A. Orientation and Administration
- B. Learning Process
- C. Fire Command Overview

II. Fire Behavior
- A. Fire Chemistry
- B. Fire phases
- C. Effects of time
- D. Fire behavior within structures

III. Fire Control Concepts
- A. Extinguishing Agents
- B. Water application
- C. Protection systems

IV. Pre-Fire Planning
- A.. Building construction
- B. Occupancy types
- C. Fire data
- D. Resources
  1. Local resources
  2. Federal resources

V. First on Scene
- A. Fireground safety
- B. Size-up
- C. Strategy, tactics and methods
- D. Report on conditions
- E. Role of the first-In officer
- F. Company operations

G Determining resources requirements
H. Apparatus placement
I. Initial fire attack

VI. Management Overview

A. The fire service
B. The company officer
C. Pressure of command
D. Performance standards
E. Levels of emergency
F. Decision making
G. Communications
H. Management by objectives
I. Division of fire fighting
J. Command/Control components

DE Addendum Revisions

Response #1: Explain how time and/or distance will separate the instructor and students. Definition and Application as defined by Title 5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

- lecture and all outside activities fully online

Specify "Other" here:

No Value

Response #2: Explain how the instructor will distribute the required number of unit hours per week using technology. Definition and Application as defined by Title 5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

- lecture video
- discussion board activities
- quiz activities
- supplemental instructional video, such as YouTube, TedTalks, and PBS

Specify "Other" here:

No Value

Response #3: Explain how the instructor will meet ADA requirements in designing this course. Course Quality Standards as defined by Title 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply)

- work with the College Instructional Designer
- work with the College ADA specialist
- work with the local POCR Team
- receive a 'Badge' from the CVC-OEI Design Academy
- utilize a 'Blueprint' course

Response #4: Explain how the instructor's course will meet the same quality standards as an in-person counterpart. Course Quality Standards as defined by Title 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply) • The online course will offer:

- weekly lectures
- discussion opportunities between students weekly
- student-to-student activities such as group work
- regular assessment: both formative and summative

- regular feedback weekly
- re-teaching opportunities

Specify "Other" for Response #3 here:

No Value

Specify "Other" for Response #4 here:

No Value

Response #5: Explain how the instructor will conduct regular and effective contact between the instructor and students. Please include the time frame parameters. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – select all that apply)

- pre-class 'Welcome Letter'
- weekly lectures
- weekly announcement using the LMS (Canvas)
- online orientation – non-mandatory
- timely feedback within the LMS (Canvas) – within 72-hours of the due date
- midterm and end-of-course surveys
- College email – respond within 24-hours M-F
- LMS (Canvas) email – respond within 24-hours M-F
- periodic online review/study sessions – non-mandatory
- periodic online workshops – non-mandatory

Specify "Other" here:

No Value

Response #6: Explain how the instructor will promote regular and effective contact among students either synchronously or asynchronously. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – select all that apply)

- weekly discussion boards – robust posts and replies
- LMC (Canvas) email

Specify "Other" here:

No Value

Response #7: This course will strive to meet the quality standards for alignment at 100% as set forth in the CVC-OEI Rubric in one or more of the following ways. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-down menu – select all that apply)

- The instructor has conducted a self-assessment of the CVC-OEI Rubric.
- The instructor will be using a 'Blueprint' course created by Merced College.

Specify "Other" here:

No Value

Response #8: The following parties will be responsible to ensure the portion of instruction delivered via distance education meets regular and effective contact. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-down

menu – select all that apply)

- Dean of the Cohort/Department
- Faculty teaching the course

Specify "Other" here:

No Value

Response #9: The College has identified the instructor as prepared to teach in a distance, education delivery method consistent with local district policies and negotiated agreements in the following ways. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu – select all that apply)

- other (specify in comment box)

Specify "Other" here:

None completed yet

Response #10: Explain the process the department faculty used to determine this course was a good fit for online delivery. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu – select all that apply)

- department discussions on approving DE for this course (specify date(s) in comment box)

Specify "Other" here:

4/25/20

Response #11: The Dean of the discipline supports this course as a good fit for online delivery. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu)

- Yes

Exhibit T

Merced College
Course Outline of Record Report
06/28/2022

FIRE72B : Fire Command I - Module B

General Information

Author:	• Gabriela Garcia
Course Code (CB01) :	FIRE72B
Course Title (CB02) :	Fire Command I - Module B
Cohort:	Fire Technology
Proposal Start:	2019U
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	Advanced Occupational
Distance Education Approved:	Yes
Course Control Number (CB00) :	CCC000367090
Curriculum Committee Approval Date:	09/17/2015
Board of Trustees Approval Date:	01/18/2005
External Review Approval Date:	10/06/2011
Course Description:	This course is designed to provide the fire company officer with information and experience in command and control techniques at the scene of a hazardous materials emergency.
Submission Rationale:	No value
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Fire Technology
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Letter Grade Methods
- Pass/No Pass

☐ Allow students to gain Credit for Prior Learning (CPL)

Allowed Number of Retakes

0

Course Prior To College Level (CB21)

No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

Course is part of a program (CB24)

Associated Program	Award Type	Active
Fire Technology (CT)	Certificate of Achievement (16+ units)	2018U

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07) 2

Maximum Credit Units (CB06) 2

Total Course In-Class (Contact) Hours 40.5

Total Course Out-of-Class Hours 75.96

Total Student Learning Hours 116.46

Faculty Load 0

Credit / Non-Credit Options

Course Credit Status (CB04)
Credit - Degree Applicable

Course Non Credit Category (CB22)
Credit Course.

Non-Credit Characteristic
No Value

Course Classification Code (CB11)
Credit Course.

☐ Variable Credit Course

Funding Agency Category (CB23)
Not Applicable.

☐ Cooperative Work Experience Education Status (CB10)

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	2.22	4.22
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	40.5
Laboratory	0
Activity	0
Total	40.5

Course Out-of-Class Hours

Lecture	75.96
Laboratory	0
Activity	0
Total	75.96

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85A - Foundations in Academic Litera

OR ENGL-85AC OR ENGL-85E **Objectives**

- A1. Make connections between course readings and prior knowledge.
- A4. Annotate a variety of texts to identify thesis, primary support, and other rhetorical features.
- C. Apply, at the pre-transfer level, critical thinking strategies of summary, analysis, evaluation, and synthesis to engage with the ideas of texts.

Outcomes

- Use the reading process, at the pre-transfer level, to access a variety of texts.
- Apply, at the pre-transfer level, critical thinking strategies, such as summary, analysis, evaluation, and synthesis, to engage in both the reading and writing process.

AND

Prerequisite

FIRE72A - Fire Command I - Module A

Outcomes

- Define at the introductory level human resource management.
- Analyze the organizational structure used within the fire service, including duties and responsibilities.
- Evaluate the communication skills appropriate for reporting on conditions and managing resources at an emergency scene.
- Design a pre-fire plan in order to utilize that information when responding to an emergency scene.
- Identify the methods to size-up emergency situations; and the strategies, tactics and methods necessary to manage those situations.

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
No value	No value

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Rationale	No value

Methods of Instruction	Demonstration
Rationale	No value
Methods of Instruction	Other
Rationale	Other - Video
Methods of Instruction	Other
Rationale	Other - Role-playing

Assignments

READING
1. Text
2. Supplementary handout materials

WRITING
1. Preplanning programs
2. Evacuation plans

OUTSIDE
1. Touring industrial areas in order to evaluate potential hazardous materials emergencies.
2. Research liability issues relative to command situations
3. Reading and reviewing text
4. Preparing reports

CRITICAL THINKING
1. The student will identify and classify hazardous materials and analyze them in order to implement a proper command response

Methods of Evaluation	Rationale
Class Participation	No value
Exams/Tests	No value
Other	Other - Reports

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
California State Fire Marshal	Student Manual Fire Command 1B	California State Fire Marshal	1998	

Other Instructional Materials

No Value

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

No value

CSLOs

Understand the physical properties of hazardous materials. Expected SLO Performance: 70.0

Fire Technology
Fire Technology (CT)

At a basic level apply the principles of fire technology.

ISLOs
Core ISLOs

Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Evaluate and summarize state and federal legislation relative to hazardous materials responder liability issues. Expected SLO Performance: 70.0

Fire Technology
Fire Technology (CT)

At a basic level apply the principles of fire technology.

ISLOs
Core ISLOs

Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Distinguish hazardous materials response resources, reference materials, data bases, and product information. Expected SLO Performance: 70.0

Fire Technology
Fire Technology (CT)

At a basic level apply the principles of fire technology.

ISLOs
Core ISLOs

Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Categorize hazardous materials containers typically encountered during storage, transportation, and industrial use incidents. Expected SLO Performance: 70.0

Fire Technology
Fire Technology (CT)

At a basic level apply the principles of fire technology.

Demonstrate effective verbal and nonverbal communication skills.

Demonstrate effective written communication skills.

ISLOs
Core ISLOs

Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Assess and apply first-in hazardous materials incident command techniques under simulation conditions. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
	Demonstrate effective verbal and nonverbal communication skills.
	Demonstrate effective written communication skills.
	Demonstrate the ability to evaluate and adhere to ethics and compassionate treatment of patients and victims.

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Outline

Course Outline

I. Review of incident command system

II. Fire Command IA 1FT 72A review

III. Multi-casualty incidents
- A. Components of triage and START
- B. ICS and EMS multi-casualty
- C. ICS-MCI implementation overview

IV. Hazardous materials incidents
- A. Hazardous materials overview
- B. Hazardous materials properties
- C. Toxicology
- D. Site control I work zones
- E. Evacuation considerations
- F. Decision-making process
- G. ICS and the hazardous materials incident
  1. State legislation
  2. Federal legislation
  3. Liability issues
  4. Preplanning
  5. Protective clothing limitations
  6. Command post and staging areas
  7. Coordinating resources

V. Hazardous materials data bases
- A. DOT guide books
- B. Shipping papers
- C. BLEVES
- D. Vessels
- E. Containers
- F. Railroads
- G. Pesticides
- H. Protective environment

VI. Wildland fire incidents
- A. Factors affecting wildland fires
- B. Defensive and offensive strategies in wildland fire fighting
- C. Direct and indirect attacks
- D. Structure protection and triage in wildland fires
- E. Wildland fire safety

VII. Containment Techniques
- A. Decontamination
- B. Evacuation decision-making

DE Addendum Revisions

Response #1: Explain how time and/or distance will separate the instructor and students. Definition and Application as defined by Title 5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

- lecture and all outside activities fully online

Specify "Other" here:

No Value

Response #2: Explain how the instructor will distribute the required number of unit hours per week using technology. Definition andApplication as defined by Title 5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

- lecture video
- discussion board activities
- quiz activities
- supplemental instructional video, such as YouTube, TedTalks, and PBS

Specify "Other" here:

No Value

Response #3: Explain how the instructor will meet ADA requirements in designing this course. Course Quality Standards as defined byTitle 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply)

- work with the College Instructional Designer
- work with the College ADA specialist
- work with the local POCR Team
- receive a 'Badge' from the CVC-OEI Design Academy
- utilize a 'Blueprint' course

Response #4: Explain how the instructor's course will meet the same quality standards as an in-person counterpart. Course Quality Standards as defined by Title 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply) • The online coursewill offer:

- weekly lectures
- discussion opportunities between students weekly
- student-to-student activities such as group work
- regular assessment: both formative and summative
- regular feedback weekly
- re-teaching opportunities

Specify "Other" for Response #3 here:

No Value

Specify "Other" for Response #4 here:

No Value

Response #5: Explain how the instructor will conduct regular and effective contact between the instructor and students. Please includethe time frame parameters. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – select all that apply)

- pre-class 'Welcome Letter'
- weekly lectures
- weekly announcement using the LMS (Canvas)
- online orientation – non-mandatory
- timely feedback within the LMS (Canvas) – within 72-hours of the due date

- midterm and end-of-course surveys
- College email – respond within 24-hours M-F
- LMS (Canvas) email – respond within 24-hours M-F
- periodic online review/study sessions – non-mandatory
- periodic online workshops – non-mandatory

Specify "Other" here:

No Value

Response #6: Explain how the instructor will promote regular and effective contact among students either synchronously or asynchronously. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – selectall that apply)

- weekly discussion boards – robust posts and replies
- LMC (Canvas) email

Specify "Other" here:

No Value

Response #7: This course will strive to meet the quality standards for alignment at 100% as set forth in the CVC-OEI Rubric in one or more of the following ways. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-down menu

– select all that apply)

- The instructor has conducted a self-assessment of the CVC-OEI Rubric.
- The instructor will be using a 'Blueprint' course created by Merced College.

Specify "Other" here:

No Value

Response #8: The following parties will be responsible to ensure the portion of instruction delivered via distance education meetsregular and effective contact. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-downmenu – select all that apply)

- Dean of the Cohort/Department
- Faculty teaching the course

Specify "Other" here:

No Value

Response #9: The College has identified the instructor as prepared to teach in a distance, education delivery method consistent withlocal district policies and negotiated agreements in the following ways. Faculty Selection and Workload as defined by Title 5 Section55208. (Possible Responses in the pull-down menu – select all that apply)

- other (specify in comment box)

Specify "Other" here:

None completed yet

Response #10: Explain the process the department faculty used to determine this course was a good fit for online delivery. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu – select all that apply)

- department discussions on approving DE for this course (specify date(s) in comment box)

Specify "Other" here:

4/25/20

Response #11: The Dean of the discipline supports this course as a good fit for online delivery. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu)

- Yes

Exhibit U

Merced College
Course Outline of Record Report
06/28/2022

FIRE73A : Fire Inspector 1A

General Information

Author:	• Joe Faculty
Course Code (CB01) :	FIRE73A
Course Title (CB02) :	Fire Inspector 1A
Cohort:	Fire Technology
Proposal Start:	2018S
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	Advanced Occupational
Distance Education Approved:No	
Course Control Number (CB00) :CCC000380657	
Curriculum Committee Approval Date:10/05/2017	
Board of Trustees Approval Date:01/18/2005	
External Review Approval Date:10/05/2017	
Course Description:	This course provides students with a basic knowledge of the roles and responsibilities of a Fire Inspector I including legal responsibilities and authority, codes and standards, the inspection process, confidentiality and privacy requirements, and ethical conduct, and administrative tasks including preparing inspection reports, recognizing the need for a permit or plan review, investigating common complaints, and participating in legal proceedings.
Submission Rationale:	No value
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Fire Technology
Alternate Master Discipline Preferred:No value	
Bachelors or Associates Discipline Preferred:No value	
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Letter Grade Methods
- Pass/No Pass

☐ Allow students to gain Credit for Prior Learning (CPL)

Allowed Number of Retakes

0

Course Prior To College Level (CB21)

No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

Course is part of a program (CB24)

Associated Program	Award Type	Active
Fire Technology (CT)	Certificate of Achievement (16+ units)	2018U

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07)	2
Maximum Credit Units (CB06)	2
Total Course In-Class (Contact) Hours	40
Total Course Out-of-Class Hours	79.92
Total Student Learning Hours	119.92

Faculty Load 0

Credit / Non-Credit Options

Course Credit Status (CB04)

Credit - Degree Applicable

Course Non Credit Category (CB22)

Credit Course.

Non-Credit Characteristic

No Value

Course Classification Code (CB11)

Credit Course.

Variable Credit Course

Funding Agency Category (CB23)

Not Applicable.

Cooperative Work Experience Education Status (CB10)

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	2.22	4.44
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	40
Laboratory	0
Activity	0
Total	40

Course Out-of-Class Hours

Lecture	79.92
Laboratory	0
Activity	0
Total	79.92

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85A - Foundations in Academic Litera

OR ENGL-85AC OR ENGL-85E

AND

Prerequisite

FIRE30 - Fire Protection Organization

Or current volunteer, paid call, or seasonal or full-time firefighter for a certified fire protection department.

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
No value	No value

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Rationale	No value
Methods of Instruction	Demonstration
Rationale	No value
Methods of Instruction	Other
Rationale	Other - Video

Assignments

READING
1. Text
2. Handouts

WRITING
1. Fire prevention analysis report

OUTSIDE
1. Reading and reviewing student handouts

CRITICAL THINKING
1. Utilizing problem-solving techniques in relation to code enforcement; analyze fire prevention needs and complete written assignments.
2. Complete written assignments that demonstrate the ability to document findings involving fire code infractions and/or violations.

Methods of Evaluation	Rationale
Class Participation	No value
Exams/Tests	No value
Other	Other - Written assignments

Equipment

California Building Code (International Code Council, 2013 edition, ISBN: 9781609834579) 2013 California Code of Regulations (CCR) Title 19 California Fire Code (with Title 19 excerpts) (International Code Council, 2013 edition, ISBN: 9781609834609)

Textbooks

Author	Title	Publisher	Date	ISBN
-Brett Lacey and Paul Valentine	Fire Prevention Applications for the Company Officer	California Department of Forestry &Fire Protection Office of State Fire Marshal/State Fire Training	2010	
n/a	California Fire Code (with Title 19 excerpts)	International Code Council	01-01-2013	

Other Instructional Materials

Description	Fire Inspection and Code Enforcement (IFSTA, 7th edition, ISBN: 9780879393489) Or Fire Inspector: Principles and Practice (International Association of Fire Chiefs, 1st ed., ISBN: 9780763749392)
Author	
Citation	Fire Inspector 1A
Description	Fire Technology and Fire Engineering journals
Author	No value
Citation	No value

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

A. The students will learn the responses to a variety of fire prevention situations in a professional and effective manner. B. The student will be prepared as the first-level fire officer to deal with the responsibilities of fire prevention in his/her jurisdiction

CSLOs

Identify the basic fire prevention functions of a fire department. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
	Global & Community Consciousness and Responsibility - Demonstrate an understanding of different cultures and knowledge of historical eras and the important of community involvement

Evaluate occupancies and building preparation and records management in fire prevention efforts. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
	Global & Community Consciousness and Responsibility - Demonstrate an understanding of different cultures and knowledge of historical eras and the important of community involvement

Identify principles and procedures used to correct fire hazards. Expected SLO Performance: -

Outline

Course Outline

I. **State fire training**
- A. Mission Statement
- B. California fire service training and education system

II. **Orientation and administration**
- A. Terminology relating to responsibility and authority
- B. Legally established responsibilities and empowerment
  1. State adopted regulations

III. **Responsibilities of the inspector**
- A. Components of the California Fire Code

B. Understanding reading and using the uniform fire codes
C. Legally established responsibilities and empowerment
D. Code Development Process

IV. The Inspection Process
A. Factors relating to life safety
B. General fire inspection practices
C. Procedures for correcting fire hazards and modification requirements
D. Fire drills and emergency evacuation
E. Handling fire prevention complaints

V. Confidentiality and Privacy Requirements

VI. Ethical Conduct

VII. Preparing Inspection Reports

VIII. Recognizing the need for a permit

IX. Recognizing the Need for Plan Review

X. Investigating Common Complaints

XI. Participating in Legal Proceedings

Exhibit V

Merced College
Course Outline of Record Report
06/28/2022

FIRE73B : Fire Inspector 1B

General Information

Author:	• Joe Faculty
Course Code (CB01) :	FIRE73B
Course Title (CB02) :	Fire Inspector 1B
Cohort:	Fire Technology
Proposal Start:	2018S
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	Advanced Occupational
Distance Education Approved:	No
Course Control Number (CB00) :	CCC000364666
Curriculum Committee Approval Date:	10/05/2017
Board of Trustees Approval Date:	01/18/2005
External Review Approval Date:	10/05/2017
Course Description:	This course provides students with a basic knowledge of fire and life safety aspects related to the roles and responsibilities of a Fire Inspector I including building construction, occupancy classifications, occupancy load, means of egress, hazardous conditions, fire growth potential, fire flow, and emergency planning and preparedness measures.
Submission Rationale:	No value
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Fire Technology
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Letter Grade Methods
- Pass/No Pass

☐ Allow students to gain Credit for Prior Learning (CPL)

Allowed Number of Retakes

Course Prior To College Level (CB21)

0

No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

☐ Course is part of a program (CB24)

Associated Program	Award Type	Active
Fire Technology (CT)	Certificate of Achievement (16+ units)	2018U

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07)	2
Maximum Credit Units (CB06)	2
Total Course In-Class (Contact) Hours	40
Total Course Out-of-Class Hours	79.92
Total Student Learning Hours	119.92
Faculty Load	0

Credit / Non-Credit Options

Course Credit Status (CB04)	Course Non Credit Category (CB22)	Non-Credit Characteristic
Credit - Degree Applicable	Credit Course.	No Value

Course Classification Code (CB11)
Credit Course.

Funding Agency Category (CB23)
Not Applicable.

☐ Cooperative Work Experience Education Status (CB10)

☐ Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	2.22	4.44
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	40
Laboratory	0
Activity	0
Total	40

Course Out-of-Class Hours

Lecture	79.92
Laboratory	0
Activity	0
Total	79.92

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85A - Foundations in Academic Litera

OR ENGL-85AC OR ENGL-85E

AND

Prerequisite

FIRE73A - Fire Inspector 1A

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
No value	No value

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Rationale	No value
Methods of Instruction	Demonstration
Rationale	No value
Methods of Instruction	Other
Rationale	Other - Video

Assignments

READING
1. Text
2. Handouts

WRITING
1. Fire prevention analysis report

OUTSIDE
1. Reading and reviewing student handouts

CRITICAL THINKING
1. Utilizing problem-solving techniques in relation to code enforcement; analyze fire prevention needs.
2. Complete written assignments that demonstrate the ability to document findings involving fire code infractions and/or violations.

3. Examine deficiencies and develop corrective actions to address violations and infractions.

Methods of Evaluation

	Rationale
Class Participation	No value
Exams/Tests	No value
Other	Other - Written assignments

Equipment

California Building Code (International Code Council, 2013 edition, ISBN: 9781609834579

Textbooks

Author	Title	Publisher	Date	ISBN
International Code Council	California Fire Codes (CFC)	International Fire Code Institute	2013	
IFSTA	Fire Inspection and Code Enforcement	IFSTA	2011	

Other Instructional Materials

Description	Student Handouts
Author	
Citation	Fire Inspector 1B

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

A. The student will have an understanding for performing basic fire prevention efforts at the level of company officer and fire prevention personnel.
B.The course will prepare first-level fire officers to deal with the responsibilities of fire prevention in his/her jurisdiction.

CSLOs

Demonstrate an understanding of responsibility for fire prevention inspections and related activities. Expected SLO Performance: -

Examine principles and procedures used to correct fire hazards. Expected SLO Performance: -

Examine the authority for fire prevention inspections and related activities. Expected SLO Performance: -

Outline

Course Outline

I. Orientation and Administration

II. Fire Marshal Certification Process

III. Verifying Construction Type for an Addition or Remodel

V. Identifying Occupancy Classifications for a Single-use Occupancy

VI. Computing the Allowable Occupant Load of a Single-use Occupancy

VII. Inspecting Means of Egress Elements

VIII. Recognizing Hazardous Conditions

IX. Recognizing Hazardous Fire Growth Potential in a Building or Space

Exhibit W

Merced College
Course Outline of Record Report
06/28/2022

FIRE75 : Fire Management I- Management for Company Officers

General Information

Author:	• Gabriela Garcia
Course Code (CB01) :	FIRE75
Course Title (CB02) :	Fire Management I- Management for Company Officers
Cohort:	Fire Technology
Proposal Start:	2019U
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	Clearly Occupational
Distance Education Approved:	Yes
Course Control Number (CB00) :	CCC000368866
Curriculum Committee Approval Date:	10/15/2015
Board of Trustees Approval Date:	01/18/2005
External Review Approval Date:	11/03/2011
Course Description:	This course will provide instruction to improve the student's managerial effectiveness and will require demonstration of growth and development in the use of managerial skills. The course will also stress resource identification and utilization.
Submission Rationale:	No value
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Fire Technology
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Letter Grade Methods
- Pass/No Pass

☐ Allow students to gain Credit for Prior Learning (CPL)

Allowed Number of Retakes

0

Course Prior To College Level (CB21)

No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

Course is part of a program (CB24)

Associated Program	Award Type	Active
Fire Technology (CT)	Certificate of Achievement (16+ units)	2018U

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07) 2

Maximum Credit Units (CB06) 2

Total Course In-Class (Contact) Hours 40

Total Course Out-of-Class Hours 79.92

Total Student Learning Hours 119.92

Faculty Load 0

Credit / Non-Credit Options

Course Credit Status (CB04)	Course Non Credit Category (CB22)	Non-Credit Characteristic
Credit - Degree Applicable	Credit Course.	No Value

Course Classification Code (CB11)
Credit Course.

Funding Agency Category (CB23)
Not Applicable.

Cooperative Work Experience Education Status (CB10)

☐ Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	2.22	4.44
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	40
Laboratory	0
Activity	0
Total	40

Course Out-of-Class Hours

Lecture	79.92
Laboratory	0
Activity	0
Total	79.92

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85A - Foundations in Academic Litera

OR ENGL-85AC OR ENGL-85E **Objectives**

- A1. Make connections between course readings and prior knowledge.
- A4. Annotate a variety of texts to identify thesis, primary support, and other rhetorical features.
- C. Apply, at the pre-transfer level, critical thinking strategies of summary, analysis, evaluation, and synthesis to engage with the ideas of

texts.

Outcomes

- Use the reading process, at the pre-transfer level, to access a variety of texts.
- Apply, at the pre-transfer level, critical thinking strategies, such as summary, analysis, evaluation, and synthesis, to engage in both the reading and writing process.

AND

Prerequisite

FIRE30 - Fire Protection Organization

Or current volunteer, paid call, or seasonal or full-time firefighter for a certified fire protection department **Outcomes**

- Distinguish between the educational requirements, duties, and information sources for various occupations in fire protection.
- Categorize the basic components of a fire as a chemical reaction, the major phases of fire, and the main factors that influence fire spread and fire behavior, and its effects on environment, at a basic level.
- Identify the various types of public and private fire protection equipment and systems and describe the purpose and scope of their activities, at a basic level.
- Examine fire fighting strategy and tactics using the types of common fire department apparatus, equipment, and personal safety equipment, at a basic level.

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
No value	No value

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Rationale	No value
Methods of Instruction	Demonstration
Rationale	No value

Methods of Instruction	Other
Rationale	Other - Video
Methods of Instruction	Other
Rationale	Other - Role Playing

Assignments

READING
1. Text
2. Handouts

WRITING
1. Class notes
2. Management report forms

OUTSIDE
1. Reading and reviewing student handouts and notes
2. Develop a resource list applicable to fire management/supervision

CRITICAL THINKING
1. Through group exercises and written assignments, the student will demonstrate his/her ability to identify and implement a variety of management/supervision styles.
2. Through class participation and oral exercises, the student will identify the resources required and evaluate the effective utilization of resources in problem solving exercises.

Methods of Evaluation	Rationale
Class Participation	No value
Exams/Tests	No value
Other	Other - Written assignments

Equipment

Student handouts

Textbooks

Author	Title	Publisher	Date	ISBN
n/a	Fire Management 1: Management and Supervision for Company Officers Student Manual	California Department of Forestry and Fire Protection Office of State Fire Marshal/State Fire Training	01-01-2000	
California State Fire Marshal	Fire and Emergency Services Company Officer	California State Fire Marshal	2000	

Other Instructional Materials

No Value

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

No value

CSLOs

Analyze and summarize how internal and external influences impact the company officer and how the company officer can effectively deal with these influences. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology. Demonstrate effective verbal and nonverbal communication skills.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information Global & Community Consciousness and Responsibility - Demonstrate an understanding of different cultures and knowledge of historical eras and the important of community involvement Personal Development and Life-Long Learning - Demonstrate self-management, maturity and growth through practices that promote physical, mental and emotional well being.

Examine an overview of supervision and management concepts, practices, and theories. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology. Demonstrate effective verbal and nonverbal communication skills. Demonstrate effective written communication skills.
ISLOs Core ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose. Personal Development and Life-Long Learning - Demonstrate self-management, maturity and growth through practices that promote physical, mental and emotional well being.

Analyze and summarize the advantages, disadvantages, and effects of various recognized styles of leadership and leadership and leadership profiles. Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)	At a basic level apply the principles of fire technology.

ISLOs	Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs	Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.

Personal Development and Life-Long Learning - Demonstrate self-management, maturity and growth through practices that promote physical, mental and emotional well being.

Analyze the basic supervisorial and managerial skills required in decision making, delegating, personnel motivation, communicating, time management, resource management, record keeping, team building, disciplinary functions, and dealing with change and stress.

Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)

At a basic level apply the principles of fire technology.

Demonstrate effective written communication skills.

ISLOs Core ISLOs

Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.

Personal Development and Life-Long Learning - Demonstrate self-management, maturity and growth through practices that promote physical, mental and emotional well being.

Evaluate and provide examples of the following techniques used by supervisors in managing personnel: conducting interviews, counseling, controlling work activities, goal setting, evaluating, and promoting affirmative action.

Expected SLO Performance: 70.0

Fire Technology Fire Technology (CT)

At a basic level apply the principles of fire technology.

Demonstrate effective verbal and nonverbal communication skills. Demonstrate effective written communication skills.

ISLOs Core ISLOs

Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.

Global & Community Consciousness and Responsibility - Demonstrate an understanding of different cultures and knowledge of historical eras and the important of community involvement

Personal Development and Life-Long Learning - Demonstrate self-management, maturity and growth through practices that promote physical, mental and emotional well being.

Outline

Course Outline

I. Introduction

- A. Orientation and Administration
- B. Introduction to Management and Supervision
- C. Basic Theories and Principles of Management
    1. Leadership styles and traits
    2. Introduction to leader match
    3. Methods of changing situational control

II. Supervision

- A. Principles of Organizations and Organizational Structure
- B. Motivation
- C. Delegation
- D. Problem Solving/Decision Making
    1. Time management (non-emergency)
    2. Controlling work activities
- E. Verbal communication
- F. Planning communication
- G. Written Communication

H. Group Dynamics
I. Managing Conflict
J. Performance Evaluations
K. Coaching and Counseling,
L. Progressive Discipline
M. Due Process
N. Handling a Grievance

III. Management

A. Internal and external influences
    1. Identifying common influences
    2. Influence analysis
B. Elements of management
    1. Goal setting
    2. Applying MBO to goal setting
C. Managing change
    1. Policies, procedures, reports and record keeping
    2. Recognizing stress
D. Time management

IV. Leadership

A. Basic views of leadership
B. Situational leadership
C. Leadership qualities and traits

V. Human Relations

A. Managing the workplace environment
B. Affirmative Action
C. Equal Employment Opportunity
D. Americans with Disabilities Act

VI. Safety and Wellness Programs

A. Safety management
B. Stress management
C. Wellness

VII. Laws, Standards, and Liability

A. For Company Officer

DE Addendum Revisions

Response #1: Explain how time and/or distance will separate the instructor and students. Definition and Application as defined by Title 5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

- lecture and all outside activities fully online

Specify "Other" here:

No Value

Response #2: Explain how the instructor will distribute the required number of unit hours per week using technology. Definition and Application as defined by Title 5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

- lecture video
- discussion board activities
- quiz activities
- supplemental instructional video, such as YouTube, TedTalks, and PBS

Specify "Other" here:

No Value

Response #3: Explain how the instructor will meet ADA requirements in designing this course. Course Quality Standards as defined by Title 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply)

- work with the College Instructional Designer
- work with the College ADA specialist
- work with the local POCR Team
- receive a 'Badge' from the CVC-OEI Design Academy
- utilize a 'Blueprint' course

Response #4: Explain how the instructor's course will meet the same quality standards as an in-person counterpart. Course Quality Standards as defined by Title 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply) • The online course will offer:

- weekly lectures
- discussion opportunities between students weekly
- student-to-student activities such as group work
- regular assessment: both formative and summative
- regular feedback weekly
- re-teaching opportunities

Specify "Other" for Response #3 here:

No Value

Specify "Other" for Response #4 here:

No Value

Response #5: Explain how the instructor will conduct regular and effective contact between the instructor and students. Please include the time frame parameters. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – select all that apply)

- pre-class 'Welcome Letter'
- weekly lectures
- weekly announcement using the LMS (Canvas)
- online orientation – non-mandatory
- timely feedback within the LMS (Canvas) – within 72-hours of the due date
- midterm and end-of-course surveys
- College email – respond within 24-hours M-F
- LMS (Canvas) email – respond within 24-hours M-F
- periodic online review/study sessions – non-mandatory
- periodic online workshops – non-mandatory

Specify "Other" here:

No Value

Response #6: Explain how the instructor will promote regular and effective contact among students either synchronously or asynchronously. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – select all that apply)

- weekly discussion boards – robust posts and replies
- LMC (Canvas) email

Specify "Other" here:

No Value

Response #7: This course will strive to meet the quality standards for alignment at 100% as set forth in the CVC-OEI Rubric in one or more of the following ways. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-down menu – select all that apply)

- The instructor has conducted a self-assessment of the CVC-OEI Rubric.
- The instructor will be using a 'Blueprint' course created by Merced College.

Specify "Other" here:

No Value

Response #8: The following parties will be responsible to ensure the portion of instruction delivered via distance education meets regular and effective contact. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-down menu – select all that apply)

- Dean of the Cohort/Department
- Faculty teaching the course

Specify "Other" here:

No Value

Response #9: The College has identified the instructor as prepared to teach in a distance, education delivery method consistent with local district policies and negotiated agreements in the following ways. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu – select all that apply)

- other (specify in comment box)

Specify "Other" here:

None completed yet

Response #10: Explain the process the department faculty used to determine this course was a good fit for online delivery. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu – select all that apply)

- department discussions on approving DE for this course (specify date(s) in comment box)

Specify "Other" here:

4/25/20

Response #11: The Dean of the discipline supports this course as a good fit for online delivery. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu)

- Yes

Exhibit X

Merced College

Course Outline of Record Report

06/28/2022

FIRE76A : Fire Apparatus Driver/Operator 1A (Emergency Vehicle Operations)

General Information

Author:	• Bryan Donnelly
Course Code (CB01) :	FIRE76A
Course Title (CB02) :	Fire Apparatus Driver/Operator 1A (Emergency Vehicle Operations)
Cohort:	Fire Technology
Proposal Start:	2019U
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	Clearly Occupational
Distance Education Approved:	No
Course Control Number (CB00) :	CCC000376406
Curriculum Committee Approval Date:	10/15/2015
Board of Trustees Approval Date:	03/01/2005
External Review Approval Date:	11/03/2011
Course Description:	This course will provide fire service personnel with the knowledge of the laws and requirements that pertain to emergency vehicle operation and basic maintenance, and trouble shooting, and documentation of fire apparatus.
Submission Rationale:	Mandatory Revision CTE 2 year review
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Fire Technology
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Letter Grade Methods
- Pass/No Pass

☐ Allow students to gain Credit for Prior

Allowed Number of Retakes

Course Prior To College Level (CB21)

Learning (CPL)	0	No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

☐ Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

☐ Course is part of a program (CB24)

Associated Program	Award Type	Active
No value	No value	

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07) 2

Maximum Credit Units (CB06) 2

Total Course In-Class (Contact) Hours 40

Total Course Out-of-Class Hours 79.92

Total Student Learning Hours 119.92

Faculty Load 0

Credit / Non-Credit Options

Course Credit Status (CB04)	Course Non Credit Category (CB22)	Non-Credit Characteristic
Credit - Degree Applicable	Credit Course.	No Value

Course Classification Code (CB11)
Credit Course.

Funding Agency Category (CB23)
Not Applicable.

☐ Cooperative Work Experience Education Status (CB10)

☐ Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	2.22	4.44
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks) 18

Hours per unit divisor 54

Course In-Class (Contact) Hours

Lecture	40
Laboratory	0
Activity	0
Total	40

Course Out-of-Class Hours

Lecture	79.92
Laboratory	0
Activity	0
Total	79.92

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ENGL85A - Foundations in Academic Litera

OR ENGL-85AC OR ENGL-85E **Objectives**

- A1. Make connections between course readings and prior knowledge.
- C. Apply, at the pre-transfer level, critical thinking strategies of summary, analysis, evaluation, and synthesis to engage with the ideas of texts.

Outcomes

- Apply, at the pre-transfer level, critical thinking strategies, such as summary, analysis, evaluation, and synthesis, to engage in both the reading and writing process.

AND

Prerequisite

FIRE63A - Basic Firefighter I, Academy A

Objectives

- A. Perform skills and tasks as defined by the professional guidelines of the Firefighter 1 standards of the California State Fire Marshal. All SLO's are covered in this objective.

Outcomes

- Demonstrate competency in using hoses and nozzles.

AND

Prerequisite

FIRE63B - Basic Firefighter I, Academy B

Objectives

- A. Perform skills and relate knowledge equivalent to the requirements for Firefighter I certification as determined by the California State Fire Marshal. This objective covers all SLO's.

Outcomes

- Evaluate the emergency for safety needs and hypothetically apply appropriate methods of fire attack to fire scenarios involving various classification of fires

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
Must possess a valid California Drivers License, Class B, fire fighter restricted (minimum) must be physically fit per department standards must not have a hearing loss of 25 decibels or more in 3 of 4 frequencies must have vision better than or corrected to far visual acuity of 20/30 with contact lenses or spectacles must be a paid call, volunteer or full time fire fighter at a certified fire protection agency	No Value

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Rationale	No value
Methods of Instruction	Demonstration
Rationale	No value
Methods of Instruction	Other
Rationale	Other - Video, film and slides

Assignments

READING

Text

WRITING

1. Complete student information sheets
2. Written assignments on the following

OUTSIDE

1. Reading and reviewing class texts
2. Skills development
3. Writing reports

CRITICAL THINKING

1. Trouble shooting (examining, inspecting, analyzing and applying various solutions to various operative and inoperative components of fire apparatus and filling out appropriate forms and reports.
2. Documenting trouble shooting exercises and explaining corrective measures with appropriate solutions.
3. Applying instructional techniques to driving exercises while being evaluated.

Methods of Evaluation	Rationale
Class Participation	No value
Other	Other - Manipulation skills testing
Exams/Tests	No value
Other	Other - Written reports

Equipment

Student handouts

Textbooks

Author	Title	Publisher	Date	ISBN
IFSTA	Pumping Apparatus	International Fire	2011	

Driver/Operator Handbook	Service Training Association		
DMV	California Commercial Driver Handbook	California DMV	Current

Other Instructional Materials

Description	Current California Commercial Driver Handbook, Department of Motor Vehicles
Author	
Citation	Fire Apparatus Driver/Operator 1A (Emergency Vehicle Operations)

Materials Fee

No value

Learning Outcomes and Objectives

Course Objectives

No value

CSLOs

The student, when given information on driver responsibilities, recognized standards, and related laws for fire apparatus, will relate the information relevant to various fire apparatus driving and positioning situations by analyzing the situation and applying the appropriate law, responsibility, and/or standard.
Expected SLO Performance: 70.0

ISLOs
Core ISLOs
Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Computation - Use mathematical skills and various aspects of technology appropriate to the task

The student when given information and techniques on basic inspections, documentation, maintenance, and troubleshooting fire apparatus issues, will be able to distinguish between properly operating systems and malfunctioning or impending failure of equipment including evaluating malfunctions and the ability to make repairs.
Expected SLO Performance: 70.0

ISLOs
Core ISLOs
Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Computation - Use mathematical skills and various aspects of technology appropriate to the task

The student will be able to assess driving situations from a variety of ways, formulate questions, and project outcomes that will manipulate the situation.
Expected SLO Performance: 70.0

ISLOs
Core ISLOs
Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information

The student will, within stated time limits, operate a fire apparatus through- alley docking, station docking, serpentine, three point turn around, diminishing clearance backing exercises.
Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Outline

Course Outline

I. Responsibilities, Standards, and Laws
- A. Orientation and administration
  1. Code of Federal Regulations
  2. California Commercial Driver Handbook
- B. Fire Apparatus Driver/Operator Responsibilities
  1. California Vehicle Code
  2. California Commercial Driver Handbook
  3. NFPA Standard for Fire Apparatus Preventive Maintenance Program
  4. NFPA Standard for Fire Apparatus Driver/Operator professional qualifications
- C. Legal Aspects of emergency and non-emergency driving

II. Inspection, basic maintenance, documentation, and troubleshooting
- A. Introduction to inspection, basic maintenance, and troubleshooting
  1. Major apparatus systems grouped according to function
  2. NFPA Standard for Fire Apparatus Preventive Maintenance Program
  3. Out-of-Service criteria
- B. Inspection and Basic Maintenance of the Driver and Crew Areas, Apparatus Body, and Compartmentation
- C. Frame, Axles, Steering and Suspension Systems, Driveline, Wheels, and Tires
  1. Steering and suspension
  2. Wheels and tires
  3. Frame
  4. Steering problems, noises, vibrations
- D. Engine Systems
  1. Cooling
  2. Fuel system
  3. Oil
  4. Air filtration
  5. Exhaust
  6. Drive belt
  7. Fuel System
  8. Coolant level, lubrication system, air system (intake and exhaust)
- E. Transmission and Clutch
  1. Securely mounted
  2. Structurally sound
  3. Proper fluid level
  4. Leaking
  5. Clean
  6. Smooth or hard shifting
  7. Lubricants and Filters
  8. Transmission control and shift linkage
  9. Indicators and gauges
  10. Electronic diagnostic system
  11. Power take-off units
  12. Lock-up systems for pumps or other accessories
  13. Transmission braking systems
  14. Out-of-Service Criteria NFPA 1915
  15. Manual and Automatic Transmissions
  16. Symptom, possible cause, and possible corrective action
- F. Starting, Charging, and Other Electrical Systems
  1. Starting system
  2. Charging system
  3. Ignition system
  4. Electrical load management system (ELMS)
  5. Miscellaneous electrical components
  6. Apparatus lighting
  7. Working lighting
  8. Electrical Accessories

9. Warning devices
10. Electricity
11. Test equipment
12. Circuit defects
13. Charging and Starting Systems
14. Lighting circuits
15. Symptom, possible cause, and possible corrective action

G. Brake Systems
1. Types
2. Air Brake system
3. Hydraulic Brake systems
4. Secondary Brake systems
5. Inspection and basic maintenance
6. Symptoms, possible causes, and possible corrective actions
7. Out-ot-Service Criteria - NFPA 1915

H. Auxiliary and Accessory Equipment
1. Inspection and basic brake systems
2. Troubleshooting

I. Inspection, documentation, and reports
J. Pre-trip inspection procedures

III. Driving Practices

A. Accident statistics and liability
1. Statistics
2. CVC liability
3. Cost of accidents

B. Principles of defensive driving
1. Defensive driving
2. Factors of defensive driving
3. The Defensive Driver
4. Factors contributing to accidents
5. Safe driving techniques

C. Principles of Code 3 response
D. Procedures
E. Roadway operations
F. Driving apparatus to incidents
G. Principles of Off-Road driving
H. Principles of braking and stopping
I. Principles of steering and load control
J. Driving during adverse weather conditions
K. Positioning apparatus

IV. Driving Demonstrations

A. Diminishing clearance
B. Serpentine
C. Three-Point turnaround
D. Station apparatus backing

Exhibit Y

Merced College
Course Outline of Record Report
08/28/2025

FIRE76B : Fire Apparatus Driver/Operator 1B (Pump Operations)

General Information

Author:	• Bryan Donnelly
Course Code (CB01) :	FIRE76B
Course Title (CB02) :	Fire Apparatus Driver/Operator 1B (Pump Operations)
Cohort:	Fire Technology
Proposal Start:	2019U
TOP Code (CB03) :	(2133.00) Fire Technology
CIP Code:	(43.0201) Fire Prevention and Safety Technology/Technician
SAM Code (CB09) :	C - Clearly Occupational
Distance Education Approved:	No
Course Control Number (CB00) :	CCC000360474
Curriculum Committee Approval Date:	10/15/2015
Board of Trustees Approval Date:	03/01/2005
External Review Approval Date:	11/03/2011
Course Description:	This course will provide fire service personnel with information on pump construction, theory of pump operation, and methods for performing basic hydraulics. Further, students will receive information and techniques on basic inspections, documentation, maintenance, and troubleshooting fire pumps. This course provides the student with information on pump construction and theory of pump operations. Topics include methods for performing basic hydraulics and techniques on basic inspections, documentation, maintenance, and troubleshooting fire pumps. Each student also has the opportunity to increase his or her pumping skills during simulated pumping conditions.
Submission Rationale:	Mandatory Revision CTE 2 year review
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Fire Technology
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)	**Course Special Class Status (CB13)**

Course is not a basic skills course.

Course is not a special class.

Grade Options

- Pass/No Pass
- Letter Grade Methods

Allow students to gain Credit for Prior Learning (CPL)

Allowed Number of Retakes

0

Course Prior To College Level (CB21)

No value

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

Allow Students To Audit Course

Course Support Course Status (CB26)

No value

Associated Programs

Course is part of a program (CB24)

Associated Program

No value

Award Type

No value

Active

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

No value

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07)	2
Maximum Credit Units (CB06)	2
Total Course In-Class (Contact) Hours	40
Total Course Out-of-Class Hours	79.92
Total Student Learning Hours	119.92
Faculty Load	0

Credit / Non-Credit Options

Course Credit Status (CB04)

Credit - Degree Applicable

Course Non Credit Category (CB22)

Credit Course.

Non-Credit Characteristic

No Value

Course Classification Code (CB11)

Credit Course.

Variable Credit Course

Funding Agency Category (CB23)

Not Applicable.

Cooperative Work Experience Education Status (CB10)

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	2.22	4.44
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks)	18
Hours per unit divisor	54
Course In-Class (Contact) Hours	
Lecture	40
Laboratory	0
Activity	0
Total	40
Course Out-of-Class Hours	
Lecture	79.92
Laboratory	0
Activity	0
Total	79.92

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

MATH80 - Prealgebra

Objectives

- A. Evaluate expressions composed of real numbers including whole numbers, integers, fractions, decimals, and exponents without the use of a calculator.
- D2. Determine an appropriate technique to solve first degree equations
- E1. Evaluate problems involving unit conversions
- E3. Translate word problems to an equation and solve using an appropriate method

Outcomes

- Evaluate expressions involving square roots, ratios, proportions, and percents.
- Solve first-degree equations and application problems composed of whole numbers, integers, decimals, real numbers, and fractions.
- Solve application problems involving formulas and measurement concepts using algebra concepts and a scientific calculator.

AND

Advisory

ENGL85A - Foundations in Academic Litera

OR ENGL-85AC OR ENGL-85E **Objectives**

- A1. Make connections between course readings and prior knowledge.
- A4. Annotate a variety of texts to identify thesis, primary support, and other rhetorical features.
- C. Apply, at the pre-transfer level, critical thinking strategies of summary, analysis, evaluation, and synthesis to engage with the ideas of texts.

Outcomes

- Use the reading process, at the pre-transfer level, to access a variety of texts.
- Apply, at the pre-transfer level, critical thinking strategies, such as summary, analysis, evaluation, and synthesis, to engage in both the reading and writing process.

AND

Prerequisite

FIRE76A - Fire Apparatus Driver/Operator 1A (Emergency Vehicle Operations)

Outcomes

- The student, when given information on driver responsibilities, recognized standards, and related laws for fire apparatus, will relate the information relevant to various fire apparatus driving and positioning situations by analyzing the situation and applying the appropriate law, responsibility, and/or standard.
- The student when given information and techniques on basic inspections, documentation, maintenance, and troubleshooting fire apparatus issues, will be able to distinguish between properly operating systems and malfunctioning or impending failure of equipment including evaluating malfunctions and the ability to make repairs.
- The student will be able to assess driving situations from a variety of ways, formulate questions, and project outcomes that will manipulate the situation.
- The student will, within stated time limits, operate a fire apparatus through- alley docking, station docking, serpentine, three point turn around, diminishing clearance backing exercises.

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
Must possess a valid California Drivers License, Class A,B, or C with fire fighter endorsement (minimum) must be physically fit per department standards must not have a hearing loss of 25 decibels or more in 3 of 4 frequencies must have vision better than or corrected to far visual acuity of 20/30 with contact lenses or spectacles must be a paid call, volunteer or full time fire fighter at a certified fire protection agency	No Value

Specifications

Methods of Instruction

Methods of Instruction	Lecture
Rationale	No value
Methods of Instruction	Demonstration
Rationale	No value
Methods of Instruction	Other
Rationale	Other - Video, film and slides

Assignments

READING
Texts and handout materials
WRITING
1. Complete student information sheets
2. Complete equipment reports
OUTSIDE
1. Reading and reviewing class texts
2. Skills development
3. Writing reports
CRITICAL THINKING
1. Through demonstration and written exercises explain- trouble shooting; examining, inspecting, analyzing and applying various solutions to various operative and inoperative components of fire apparatus
2. In groups and alone, participate in trouble shooting exercises and solution finding exercises.

Methods of Evaluation	Rationale
Class Participation	No value

Other	Other - Manipulation skills testing
Other	Other - Written quizzes
Exams/Tests	No value
Other	Other - Written reports

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
IFSTA	Pumping Apparatus Driver/Operator Handbook	International Fire Service Training Association	2006	
California State Fire Marshal Office	Driver/Operator 1B Student Manual	State of California	01-01-2008	

Other Instructional Materials

Description	Current California Commercial Driver Handbook, Department of Motor Vehicles
Author	
Citation	Fire Apparatus Driver/Operator 1B (Pump Operations)

Description	Student handouts
Author	
Citation	Fire Apparatus Driver/Operator 1B (Pump Operations)

Materials Fee

No value

Learning Outcomes

Course Objectives

No value

CSLOs

Examine and relate the key attributes of pump construction and theory, Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Computation - Use mathematical skills and various aspects of technology appropriate to the task

Assess mathematical pumping problems and apply the appropriate computation method to a given hydraulics scenario. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Computation - Use mathematical skills and various aspects of technology appropriate to the task

Distinguish between properly and improperly operating pumping and mechanical systems. Expected SLO Performance: 70.0

ISLOs Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
Core ISLOs

Computation - Use mathematical skills and various aspects of technology appropriate to the task

Outline

Course Outline

I. Responsibilities, standards, and laws

- A. Orientation and administration
  1. History
  2. Relevance of standards
- B. Fire Apparatus Driver/Operator responsibilities

II. Fire Pump Construction and Theory

- A. Types
  1. Positive displacement pumps
  2. Rotary pumps
  3. Centrifugal pumps
- B. Pump mounting and drive arrangements
  1. Six methods of transmitting power to the pump
  2. Auxiliary engine driven pumps
  3. Power Take-Off pumps
  4. Front-Mount pumps
  5. Midship Pumps
  6. Rear-Mount Pumps
  7. Hydrostatic Driven Pumps
- C. Pump Piping and Valves
- D. Automatic Pressure Control Devices
  1. Types of Pressure Control Devices
  2. Pressure Relief Valves
  3. Pressure Governor
- E. Priming Devices
  1. Overview
  2. Types of priming devices
- F. Pump Panel instrumentation
- G. Auxiliary cooling devices

III. Basic Hydraulics

- A. Basic Hydraulic terminology and symbols
- B. Mathematics review
- C. Characteristics of water and principles of pressure
  1. Water can exist in three forms
  2. Weight of water
  3. Water expansion

4. Water hammer
5. How Pressure acts on fluids

D. Principle Features of Water Systems
1. Water supply sources
2. Pumps and pumping stations
3. Gravity system
4. Combination system
5. Distribution systems
6. Grid system piping
7. General information

E. Nozzle Theory
1. Types of nozzles
2. Handline nozzles
3. Broken stream nozzles
4. Master Streams
5. Nozzle Reaction

F. Calculating Gallons Per Minute
G. Principles of Friction Loss
H. Friction Loss Formulas Calculations
1. Friction loss formula
2 Friction loss coefficients
3. Calculating -o-
4. Calculating friction loss
5. Single hoseline friction loss
6. Multiple hoselines of equal size and length
7. Wyed hose lay of equal lengths
8. Siamese hoselines of equal length
9. Multiple hoselines of unequal length
10. Wyed hose lay of unequal length
11. Siamese hoselines of unequal length

I. Pump Discharge Pressure
J. Fireground Hydraulic Calculations

IV. Inspection, Maintenance, and Troubleshooting

A. Inspecting the Pump Drive Systems and Components
B. Inspecting the Pump Priming Systems
C. Inspecting the Pump Pressure Control System
D. Pump Service Testing
E. Maintenance of the Pump and Control Systems

V. Pump Practices

A. Making the Pump Operational (From Tank)
B. Transitioning to an External Water Supply
C. Operating from a Hydrant
D. Principles and Practices of Drafting Operations
E. Principles of Relay Pump Operations
F. Troubleshooting Pump Operations
G. Principles of Tandem Pumping Operations
H. Principles of Dual Pumping Operations
I. Principles and Practices of Foam Operations
J. Sprinkler and Standpipe Support

VI. Pumping Exercises

A. Introduction to Pumping Exercises
B. Types of Exercises
C. Operating from Draft
D. Operating Using a Forward Lay
E. Operating Using a Reverse Lay
F. Safety Considerations

Exhibit Z

Merced College
Course Outline of Record Report
08/07/2025

EMER-52 : Emergency Medical Technician 1 Refresher

General Information

Author:	• Gabriela Garcia
Course Code (CB01) :	EMER-52
Course Title (CB02) :	Emergency Medical Technician 1 Refresher
Cohort:	Emergency Medical
Proposal Start:	2020S
TOP Code (CB03) :	(1250.00) Emergency Medical Services
CIP Code:	(51.0904) Emergency Medical Technology/Technician (EMT Paramedic)
SAM Code (CB09) :	C - Clearly Occupational
Distance Education Approved:	Yes
Course Control Number (CB00) :	CCC000551565
Curriculum Committee Approval Date:	02/07/2019
Board of Trustees Approval Date:	03/26/2019
External Review Approval Date:	02/06/2019
Course Description:	The course is for currently certified Emergency Medical Technician 1's and for those that have successfully completed an approved EMT 1 course.The course is designed to provide the medical continuing education refresher component modules required for maintaining certification and for those that require remediation for taking the National Registry examination. Students may petition, through the Office of Admissions and Records, to retake the course for the purpose of re-certification as necessary.
Submission Rationale:	No value
Author:	No value

Faculty Requirements

Master Discipline Preferred:	• Emergency Medical Technologies
Alternate Master Discipline Preferred:	No value
Bachelors or Associates Discipline Preferred:	No value
Additional Bachelors or Associates Discipline Preferred:	No value

Course Development Options

Basic Skill Status (CB08)

Course is not a basic skills course.

Course Special Class Status (CB13)

Course is not a special class.

Grade Options

- Letter Grade Methods
- Pass/No Pass

Allow students to gain Credit for Prior Learning (CPL)

Allowed Number of Retakes

0

Course Prior To College Level (CB21)

Not applicable.

Credit for Prior Learning assessment methods accepted

No value

Retake Policy Description

No value

Allow Students To Audit Course

Course Support Course Status (CB26)

Course is not a support course

Associated Programs

Course is part of a program (CB24)

Associated Program

No value

Award Type

No value

Active

Transferability & Gen. Ed. Options

Course General Education Status (CB25)

Not Applicable

Transferability (CB05)

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07)	1.5
Maximum Credit Units (CB06)	1.5
Total Course In-Class (Contact) Hours	27
Total Course Out-of-Class Hours	54
Total Student Learning Hours	81
Faculty Load	0

Credit / Non-Credit Options

Course Credit Status (CB04)

Credit - Degree Applicable

Course Non Credit Category (CB22)

Credit Course.

Non-Credit Characteristic

No Value

Course Classification Code (CB11)

Credit Course.

Funding Agency Category (CB23)

Not Applicable.

Cooperative Work Experience Education Status (CB10)

Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	1.5	3
Laboratory Hours	0	0
Activity Hours	0	0

Course Student Hours

Course Duration (Weeks)	18
Hours per unit divisor	54
Course In-Class (Contact) Hours	
Lecture	27
Laboratory	0
Activity	0
Total	27
Course Out-of-Class Hours	
Lecture	54
Laboratory	0
Activity	0
Total	54

Time Commitment Notes for Students

No value

Faculty Load

Extra Duties: 0

Faculty Load: 0

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

No Value

Entrance Skills

Entrance Skills	Description
No value	No value

Limitations on Enrollment

Limitations on Enrollment	Description
Current EMT Certification and Current CPR course based on American Red Cross Professional Rescuer or American Heart Association Healthcare Provider or Successful completion of an approved EMT 1 course and current CPR course based on American Red Cross Professional Rescuer or American Heart Association Healthcare Provider.	No Value

Specifications

Methods of Instruction

Methods of Instruction	Class Discussion
Rationale	No value
Methods of Instruction	Demonstration with Return Demonstration
Rationale	No value
Methods of Instruction	Observation and Demonstration
Rationale	No value
Methods of Instruction	Lecture
Rationale	No value

Assignments

READING
Text

Handout materials

WRITING
Patient assessment forms

OUTSIDE
Reading of assigned materials
Completion of assigned work

CRITICAL THINKING
1. Exam(s)
2. Quizzes
3. Homework problems
4. Skill Demonstration

Methods of Evaluation	Rationale
Class Performance	No value
Exams/Tests	No value
Simulation	No value

Equipment

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
American Academy of Orthopaedic Surgeions	Emergency Care and Transportation of the Sick and Injured	Jones and Bartlett	01-01-2017	

Other Instructional Materials

No Value

Materials Fee

No value

Learning Outcomes

Course Objectives

A. Describe the roles and responsibilities of an EMT with regard to personal safety and wellness, as well as the safety of others.

B. Compare patient assessment and treatment modalities relative to age and human life span development.

C. Describe the need for lifesaving interventions to manage a patient's airway, breathing, and circulation.

CSLOs

Use assessment findings to identify and treat illness/injury. Expected SLO Performance: 70.0

ISLOs Core ISLOs
- Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
- Communication - Use language and non-verbal modes of expression appropriate to the audience and purpose.
- Personal Development and Life-Long Learning - Demonstrate self-management, maturity and growth through practices that promote physical, mental and emotional well being.

Perform the skills required by NREMT for certification. Expected SLO Performance: 70.0

ISLOs Core ISLOs
- Global & Community Consciousness and Responsibility - Demonstrate an understanding of different cultures and knowledge of historical eras and the important of community involvement

Describe behavior consistent with the ethical standards of EMS. Expected SLO Performance: 70.0

ISLOs Core ISLOs
- Cognition - Use critical thinking skills to analyze, synthesize and evaluate ideas and information
- Global & Community Consciousness and Responsibility - Demonstrate an understanding of different cultures and knowledge of historical eras and the important of community involvement
- Personal Development and Life-Long Learning - Demonstrate self-management, maturity and growth through practices that promote physical, mental and emotional well being.

Outline

Course Outline

Preparatory
A. Scene Safety
B. Quality Improvement
C. Health and Safety
D. Medical – Legal

Airway
A. Opening the Airway
B. Techniques of Suctioning
C. Techniques of Artificial Ventilation
D. Airway Adjuncts
E. Oxygen

Patient Assessment
A. Scene Size-up / Assessment
B. Initial Assessment
C. Focused History and Physical Exam
D. Ongoing Assessment
E. Verbal Communication
F. Interpersonal Communication

G. Prehospital Care Report

Medical / Behavioral
A. General Pharmacology
B. Breathing Difficulty
C. Cardiac Emergencies
D. Emergency Medical Care of a Patient with an Altered Mental Status
E. Emergency Medical Care of an Altered Mental Status with a history of Diabetes
F. Emergency Medical Care of an Allergic Reaction
G. Emergency Medical Care of Poisoning/Overdose
H. Behavioral Emergencies

Trauma
A. Shock
B. Emergency Medical Care of an Open Chest Wound
C. Emergency Medical Care for an Open Abdominal Injury
D. Emergency Medical Care of Amputations
E. Emergency Medical Care of Burns
F. Injuries to Bones and Joints
G. Head and Spine Injuries
H. Rapid Extrication

Obstetrics, Infants and Children
A. Normal Delivery
B. Abnormal Deliveries
C. Medical Problems in Infants and Children
D. Trauma in Children

DE Addendum Revisions

Response #1: Explain how time and/or distance will separate the instructor and students. Definition and Application as defined by Title 5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

- face-to-face lab and online lecture and activities – hybrid

Specify "Other" here:

No Value

Response #2: Explain how the instructor will distribute the required number of unit hours per week using technology. Definition and Application as defined by Title 5 Section 55220. (Possible Responses in the pull-down menu – select all that apply)

- lecture video
- discussion board activities
- quiz activities
- content via Google Slide / PowerPoint presentations
- supplemental instructional video, such as YouTube, TedTalks, and PBS

Specify "Other" here:

No Value

Response #3: Explain how the instructor will meet ADA requirements in designing this course. Course Quality Standards as defined by Title 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply)

- work with the College Instructional Designer

- work with the College ADA specialist
- work with the local POCR Team
- receive a 'Badge' from the CVC-OEI Design Academy
- utilize a 'Blueprint' course

Response #4: Explain how the instructor's course will meet the same quality standards as an in-person counterpart. Course Quality Standards as defined by Title 5 Section 55202. (Possible Responses in the pull-down menu – select all that apply) • The online course will offer:

- weekly lectures
- discussion opportunities between students weekly
- student-to-student activities such as group work
- regular assessment: both formative and summative
- regular feedback weekly
- re-teaching opportunities

Specify "Other" for Response #3 here:

No Value

Specify "Other" for Response #4 here:

No Value

Response #5: Explain how the instructor will conduct regular and effective contact between the instructor and students. Please include the time frame parameters. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – select all that apply)

- pre-class 'Welcome Letter'
- weekly lectures
- weekly announcement using the LMS (Canvas)
- online orientation – non-mandatory
- timely feedback within the LMS (Canvas) – within 72-hours of the due date
- gradebook alerts – weekly
- midterm and end-of-course surveys
- College email – respond within 24-hours M-F
- LMS (Canvas) email – respond within 24-hours M-F
- office phone – respond within 24-hours M-F
- periodic online review/study sessions – non-mandatory
- periodic online workshops – non-mandatory

Specify "Other" here:

No Value

Response #6: Explain how the instructor will promote regular and effective contact among students either synchronously or asynchronously. Regular and Effective Contact as defined by Title 5 Section 55204. (Possible Responses in the pull-down menu – select all that apply)

- weekly discussion boards – robust posts and replies
- group work, peer review, small group discussion boards, other (specify in comment box)
- LMC (Canvas) email

Specify "Other" here:

No Value

Response #7: This course will strive to meet the quality standards for alignment at 100% as set forth in the CVC-OEI Rubric in one or more of the following ways. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-down menu – select all that apply)

- The instructor has conducted a self-assessment of the CVC-OEI Rubric.
- The instructor's course has been 'Badged' by the CVC-OEI Design Academy.
- The instructor will be using a 'Blueprint' course created by Merced College.

Specify "Other" here:

No Value

Response #8: The following parties will be responsible to ensure the portion of instruction delivered via distance education meets regular and effective contact. Separate Course Approval as defined by Title 5 Section 55206. (Possible Responses in the pull-down menu – select all that apply)

- Dean of the Cohort/Department
- Faculty teaching the course

Specify "Other" here:

No Value

Response #9: The College has identified the instructor as prepared to teach in a distance, education delivery method consistent with local district policies and negotiated agreements in the following ways. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu – select all that apply)

- other (specify in comment box)

Specify "Other" here:

Not completed yet

Response #10: Explain the process the department faculty used to determine this course was a good fit for online delivery. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu – select all that apply)

- other (specify in the comment box)

Specify "Other" here:

Not recommended but can be hybrid in an 'emergency'

Response #11: The Dean of the discipline supports this course as a good fit for online delivery. Faculty Selection and Workload as defined by Title 5 Section 55208. (Possible Responses in the pull-down menu)

- Yes