

## FIRE108 : Fire Apparatus And Equipment

### General Information

Author:	<ul style="list-style-type: none"><li>Tracy Rickman</li></ul>
Course Code (CB01) :	FIRE108
Course Title (CB02) :	Fire Apparatus And Equipment
Department:	FIRE
Proposal Start:	Spring 2025
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
Will this course be taught asynchronously?:	No
Course Control Number (CB00) :	CCC000151003
Curriculum Committee Approval Date:	05/22/2024
Board of Trustees Approval Date:	07/16/2024
Last Cyclical Review Date:	05/22/2024
Course Description and Course Note:	FIRE 108 covers the general technical knowledge of driving laws, driving techniques, construction, and operation of pumping engines, ladder trucks, aerial platforms, and specialized equipment. Students also learn about firefighter licensing programs in California and apparatus maintenance procedures.
Justification:	Mandatory Revision
Academic Career:	<ul style="list-style-type: none"><li>Credit</li></ul>
Mode of Delivery:	
Author:	Tracy Rickman
Course Family:	

### Academic Senate Discipline

Primary Discipline:	<ul style="list-style-type: none"><li>Fire Technology</li></ul>
Alternate Discipline:	No value
Alternate Discipline:	No value

## Course Development

### Basic Skill Status (CB08)

Course is not a basic skills course.

Allow Students to Gain Credit by Exam/Challenge

### Course Special Class Status (CB13)

Course is not a special class.

### Pre-Collegiate Level (CB21)

Not applicable.

### Grading Basis

- Grade with Pass / No-Pass Option

### Course Support Course Status (CB26)

Course is not a support course

## General Education and C-ID

### General Education Status (CB25)

Not Applicable

### Transferability

Transferable to CSU only

### Transferability Status

Approved

## Units and Hours

### Summary

**Minimum Credit Units (CB07)** 3

**Maximum Credit Units (CB06)** 3

**Total Course In-Class (Contact) Hours** 54

**Total Course Out-of-Class Hours** 108

**Total Student Learning Hours** 162

### Credit / Non-Credit Options

#### Course Type (CB04)

Credit - Degree Applicable

#### Noncredit Course Category (CB22)

Credit Course.

#### Noncredit Special Characteristics

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	3	6
Laboratory Hours	0	0
Studio Hours	0	0

### Course Student Hours

<b>Course Duration (Weeks)</b>	18
<b>Hours per unit divisor</b>	0
<b>Course In-Class (Contact) Hours</b>	
Lecture	54
Laboratory	0
Studio	0

**Total** 54

**Course Out-of-Class Hours**

Lecture	108
Laboratory	0
Studio	0
<b>Total</b>	<b>108</b>

**Time Commitment Notes for Students**

No value

**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**

ESL141 - Grammar And Writing IV

**Objectives**

- Compose a 400 to 450-word thesis-based essay which: (a) summarizes and cites appropriately a reading passage provided as a prompt, (b) includes a clear thesis statement, (c) uses evidence to support the thesis, (d) shows clear organization into an introduction, body, and conclusion, and (e) uses appropriate rhetorical modes such as comparison/contrast, cause/effect, and persuasion in order to support a thesis.

---

**OR**

**Advisory**

ENGL101 - Introduction to College Reading and Composition

**Objectives**

- Develop varied and flexible strategies for generating, drafting, and revising essays.
  - Find, evaluate, analyze, and interpret primary and secondary sources, incorporating them into written essays using appropriate documentation format.
-

## Entry Standards

Entry Standards

## Course Limitations

Cross Listed or Equivalent Course

## Specifications

### Methods of Instruction

Methods of Instruction                      Lecture

Methods of Instruction                      Multimedia

Methods of Instruction                      Collaborative Learning

Methods of Instruction                      Demonstrations

### Out of Class Assignments

- Written essays on fire apparatus

### Methods of Evaluation

### Rationale

Exam/Quiz/Test

Quizzes

Exam/Quiz/Test

Midterm examination

Exam/Quiz/Test

Final examination

### Textbook Rationale

No Value

### Textbooks

Author

Title

Publisher

Date

ISBN

Driver/Operator: Pump, Aerial,  
Tiller, and Mobile Water  
Supply

### Other Instructional Materials (i.e. OER, handouts)

No Value

### Materials Fee

No value

## Learning Outcomes and Objectives

### Course Objectives

Describe ladder trucks fire pump capabilities and compare to other fire apparatus.

Explain the correct positioning of fire apparatus on the fire ground.

Explain daily, monthly and annual recommended fire apparatus safety inspections and those required by state and local laws.

Explain differences in operation of a fire engine, fire truck, wildland apparatus and special rescue apparatus.

Given a fire ground situation, explain the role of the apparatus operator.

### SLOs

Identify the role and function of each type of fire apparatus.

Expected Outcome Performance: 70.0

<i>ILOs</i> Core ILOs	Demonstrate depth of knowledge in a course, discipline, or vocation by applying practical knowledge, skills, abilities, theories, or methodologies to solve unique problems.
<i>FIRE</i> Verdugo Recruit Fire Academy	Discuss the skills required for fire-fighting tactics and strategy Discuss the skills required for the use of equipment used in fire protection
<i>FIRE</i> Verdugo Fire Academy - Certificate	discuss the skills required for fire-fighting tactics and strategy. discuss the skills required for the use of equipment used in fire protection.
<i>FIRE</i> Fire Technology - Certificate	discuss the skills required for fire-fighting tactics and strategy. discuss the skills required for the use of equipment used in fire protection.
<i>FIRE</i> Fire Technology - A.S. Degree Major	discuss the skills required for fire-fighting tactics and strategy. discuss the skills required for the use of equipment used in fire protection.

Define the skills needed to safely and properly operate and use fire apparatus used in the fire service today.

Expected Outcome Performance: 70.0

<i>ILOs</i> Core ILOs	Demonstrate depth of knowledge in a course, discipline, or vocation by applying practical knowledge, skills, abilities, theories, or methodologies to solve unique problems.
	Practice ethical and responsible behavior within personal, academic, professional, social, and societal contexts; recognize and welcome diverse lifestyle choices that promote physical, intellectual, psychological, and social well-being.
<i>FIRE</i> Verdugo Recruit Fire Academy	Discuss the skills required for fire-fighting tactics and strategy
	Discuss the skills required for the use of equipment used in fire protection
<i>FIRE</i> Verdugo Fire Academy - Certificate	discuss the skills required for fire-fighting tactics and strategy.
	discuss the skills required for the use of equipment used in fire protection.
<i>FIRE</i> Fire Technology - A.S. Degree Major	discuss the skills required for fire-fighting tactics and strategy.
	discuss the skills required for the use of equipment used in fire protection.
<i>FIRE</i> Fire Technology - Certificate	discuss the skills required for fire-fighting tactics and strategy.
	discuss the skills required for the use of equipment used in fire protection.

**Describe the construction and operation of the pumping mechanism on a fire apparatus.**

Expected Outcome Performance: 70.0

<i>ILOs</i> Core ILOs	Demonstrate depth of knowledge in a course, discipline, or vocation by applying practical knowledge, skills, abilities, theories, or methodologies to solve unique problems.
<i>FIRE</i> Verdugo Recruit Fire Academy	Discuss the skills required for fire-fighting tactics and strategy
	Discuss the skills required for the use of equipment used in fire protection
<i>FIRE</i> Fire Technology - A.S. Degree Major	discuss the skills required for fire-fighting tactics and strategy.
	discuss the skills required for the use of equipment used in fire protection.
<i>FIRE</i> Verdugo Fire Academy - Certificate	discuss the skills required for fire-fighting tactics and strategy.
	discuss the skills required for the use of equipment used in fire protection.
<i>FIRE</i> Fire Technology - Certificate	discuss the skills required for fire-fighting tactics and strategy.
	discuss the skills required for the use of equipment used in fire protection.

**Explain licensing requirements needed to operate fire apparatus within the state of California.**

Expected Outcome Performance: 70.0

<i>ILOs</i> Core ILOs	Demonstrate depth of knowledge in a course, discipline, or vocation by applying practical knowledge, skills, abilities, theories, or methodologies to solve unique problems.
	Practice ethical and responsible behavior within personal, academic, professional, social, and societal contexts; recognize and welcome diverse lifestyle choices that promote physical, intellectual, psychological, and social well-being.
<i>FIRE</i> Verdugo Recruit Fire Academy	Discuss the skills required for the use of equipment used in fire protection
<i>FIRE</i> Fire Technology - A.S. Degree Major	discuss the skills required for the use of equipment used in fire protection.
<i>FIRE</i> Verdugo Fire Academy - Certificate	discuss the skills required for the use of equipment used in fire protection.
<i>FIRE</i> Fire Technology - Certificate	discuss the skills required for the use of equipment used in fire protection.

## Additional SLO Information

**Does this proposal include revisions that might improve student attainment of course learning outcomes?**

No

**Is this proposal submitted in response to learning outcomes assessment data?**

No

**If yes was selected in either of the above questions for learning outcomes, explain and attach evidence of discussions about learning outcomes.**

No Value

**SLO Evidence**

No Value

## Course Content

### Lecture Content

#### Driving (12 Hours)

- State vehicle code
- Local codes
- Department rules
- Driving techniques
- Placement of apparatus at emergencies
- DMV requirements, Firefighter license/Restricted

#### Construction, Operation, and Maintenance of Pumping Apparatus (12 Hours)

- Construction
- Maintenance
- Pumping techniques
- Hydrant operations
- Pumping techniques
- Tank operations
- Relay pumping
- Water supply

#### Construction, Operation, and Maintenance of Aerial Ladder Trucks (12 Hours)

- Aerial ladder operations
- Operating techniques
- Stabilizing the ladder/unit
- Safety precautions
- Loading
- Water tower operations

#### Construction, Operation, and Maintenance of Aerial Platforms (10 Hours)

- Maintenance
- Operation techniques and safe operations
- Stabilization protocols
- Safety precautions, safe usage while operating

#### Specializing Equipment (8 Hours)

- Wildland TYPEII apparatus
- Review of watercraft
- Quads and other off-road vehicles used for rescue

**Total hours: 54**

## Additional Information

Is this course proposed for GCC Major or General Education Graduation requirement? If yes, indicate which requirement in the two areas provided below.

No

**GCC Major Requirements**

No Value

**GCC General Education Graduation Requirements**

No Value

**Repeatability**

Not Repeatable

**Justification (if repeatable was chosen above)**

No Value

## **Resources**

**Did you contact your departmental library liaison?**

No

**If yes, who is your departmental library liason?**

No Value

**Did you contact the DEIA liaison?**

No

**Were there any DEIA changes made to this outline?**

No Value

**If yes, in what areas were these changes made:**

No Value

**Will any additional resources be needed for this course? (Click all that apply)**

No Value

**If additional resources are needed, add a brief description and cost in the box provided.**

No Value