



Basic Course Information

Semester:	Winter 2023	Instructor Name:	Alfredo Estrada
Course Title & #:	Fire 221 Fire Apparatus Driver Op1B	Email:	Alfredo.estradajr@imperial.edu
CRN #:	15149	Webpage (optional):	
Classroom:	1078 Dogwood Suite 101 Heber Ca. 92249	Office #:	
Class Dates:	Jan 9-13	Office Hours:	
Class Days:	Mon-Friday 5 days	Office Phone #:	
Class Times:	08:00-5:00	Emergency Contact:	
Units:	2.5	Class Format:	

Course Description

This course is designed to provide the student with information on driving techniques for emergency vehicle and techniques of basic inspection and maintenance of emergency vehicles, including actual driving exercises under simulated emergency conditions.

Course Prerequisite(s) and/or Corequisite(s)

Fire Apparatus Driver Operator 1B

Student Learning Outcomes

1. Select proper engine pressure when pumping multiple liners and knowledge of the principles related to operation of pumps from a hydrant and drafting water. (ILO2)
2. Demonstrate knowledge in hydraulic calculations. (ILO2)
3. Demonstrate proficiency in pump operations. (ILO1)
4. Demonstrate proficiency in drafting and multiple hose line pump operations. (ILO4)
5. Demonstrate knowledge of how to determine available fire flow with an overall exam score of 70% or higher.
6. Demonstrate knowledge of fluid pressures and water flow with an overall exam score of 70% or higher.
7. Demonstrate knowledge of vehicles used as water carriers with an overall exam score of 70% or higher.
8. Demonstrate knowledge of pump panel gauges, how to operate the pump from a hydrant, and drafting water principles with an overall exam score of 70% or higher.
9. Demonstrate knowledge of how to spot the engine close to sources of water with an overall score of 70% or higher.

Course Objectives

1. Demonstrate a working knowledge of basic hydraulic terms and water distribution systems with an overall exam score of 70% or higher.
2. Demonstrate a working knowledge of hydrants and hydrant capability based on residual pressure with an overall exam score of 70% or higher.
3. Demonstrate a working knowledge of water hammer causes, damaging effects and corrective measures with an overall exam score of 70% or higher.
- 4.



Demonstrate a working knowledge of portable and auxiliary sources of water with an overall exam score of 70% or higher.

Textbooks & Other Resources or Links

Fire Apparatus Driver/Operator Pump, Aerial, Tiller, and Mobile Water Supply 3rd Edition NFPA

Course Requirements and Instructional Methods

Assignments Students will complete the following assignment activities. When completing your written assignments in either Microsoft Word or rich text format (using Times New Roman size 12 font ONLY) – not Word Perfect. You will have 5 multiple choice graded assignments including the final.

Course Grading Based on Course Objectives

Day 1 Quiz- 25 points Day 2 Quiz- 25 points Day 3 Quiz- 25 points Day 4 Quiz- 25 points Skills – 150 points Exam- 150 points Total Points Possible- 400

Course Policies

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct. • Plagiarism is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to "cite a source" correctly, you must ask for help. • Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question. Anyone caught cheating or plagiarizing will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related

Other Course Information

Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor. • Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed by the instructor. • Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog. • Children in the classroom: Due to college rules and state laws, only students enrolled in the class may attend; children are not allowed.

IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <http://www.imperial.edu/studentresources> or click the heart icon in Canvas.

Anticipated Class Schedule/Calendar

UNIT 1: Introduction Topic 1-1: Orientation and Administration Topic

1-2: Fire Apparatus Driver/Operator – Pumping Apparatus Certification Process

Unit 2: Preventive Maintenance Topic

2-1: Perform and Document Routine Tests, Inspections, and Servicing Functions Unique to Pumping Apparatus

Unit 3: Operations Topic 3-1: Produce an Effective Hand or Master Stream Topic

3-2: Relay Pumping Operation Topic

3-3: Produce a Foam Fire Stream Topic

3-4: Supply Water to Fire Sprinkler and Standpipe Systems*****Subject to change without prior notice*****