

PALOMAR COLLEGE
COURSE OUTLINE OF RECORD FOR
DEGREE CREDIT COURSE

X Transfer Course X A.A. Degree applicable course
(check all that apply)

COURSE NUMBER AND TITLE: Fire 152 Driver Operator Academy

UNIT VALUE: 4.5

MINIMUM NUMBER OF SEMESTER HOURS: 144

BASIC SKILLS REQUIREMENTS:

Appropriate language and computation skills.

ENTRANCE REQUIREMENTS

PREREQUISITE: None

COREQUISITE: None

RECOMMENDED PREPARATION: Fire 100-Fire Protection Organization and Fire 151- Fire Fighter I Academy

SCOPE OF COURSE:

Comprehensive instruction in all aspects of operating fire apparatus. This includes fire apparatus construction and maintenance; driving laws; safe driving practices; fire pump theory; fire pump service testing; hydraulic laws and formulas as applied to the fire service; developing effective fire streams; identification and use of the various hose, nozzles, and fittings used in the fire service; water supply; nationally recognized standards for fire apparatus and equipment.

SPECIFIC COURSE OBJECTIVES:

The student will be able to:

1. Analyze construction features and performance requirements of modern fire apparatus.
2. Identify and apply driving laws and safe driving practices necessary in the operation of fire apparatus.

3. Identify and take the appropriate action regarding apparatus maintenance.
4. Perform all necessary service tests on fire pumps and equipment.
5. Describe pump theory and all pump components.
6. Apply mathematics, hydraulic laws and formulas to develop effective fire streams.
7. Drive and operate all components of fire apparatus effectively and efficiently.

CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:

I. Driver Operator 1A

- A. Specification development for fire apparatus.
- B. Construction of fire apparatus.
- C. Nationally recognized standards as they apply to fire apparatus and equipment.
- D. Driving laws and safe driving practices.
- E. Department of Motor Vehicles requirements for driving apparatus.
- F. Driving skills necessary to operate fire apparatus.
- G. Apparatus maintenance.
- H. Drive-train components and their operation.
- I. Annual fire pump service testing.

II. Driver Operator 1B

- A. Principles of applied mathematics.
- B. Principles of hydraulics.
- C. Identification and application of hose, nozzles, and fittings.
- D. Annual hose service testing.
- E. Water supply.
- F. Developing effective fire streams.

III. Manipulative Skills/Lab

- A. Perform basic driving skills.
- B. Drive fire apparatus through an approved road course.
- C. Perform an annual pump service test.
- D. Create effective fire streams.
- E. Operate fire pumps and all related components.

REQUIRED READING:

International Fire Service Training Association. Pumping Apparatus. 7th edition. Stillwater, OK: Fire Protection Publications, 1989.

San Marcos Fire Department. Hydraulics Manual. 3rd edition. San Marcos, CA: City of San Marcos, 1996.

Palomar College. Driver Operator Study Guide. 1st edition. San Marcos, CA: Palomar College, 1996.

SUGGESTED READING:

International Fire Service Training Association. Aerial Apparatus. 1st edition. Stillwater, OK: Fire Protection Publications, 1991.

International Fire Service Training Association. Fire Streams. 7th edition. Stillwater, OK: Fire Protection Publications, 1989.

REQUIRED WRITING:

One 4-6 page term paper on a topic assigned by the instructor.

OUTSIDE ASSIGNMENTS:

Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments, prorated for short-term classes.

Students are required to read required and recommended texts and study guides and prepare for exams.

INSTRUCTIONAL METHODOLOGY:

Check all that apply:

- lecture
- laboratory
- lecture-laboratory combination
- directed study

DISTANCE LEARNING:

This course may be offered as a distance learning course and meets Title 5 regulations 55370, 55372, 55374, 55376, 55378, and 55380.

Yes No

If yes, check all that apply:

- Television Course (Video one-way, e.g. ITV, video cassette, etc.)
- Online Course (Text one-way, e.g. newspaper, correspondence, electronic file, etc.)
- Two-Way Video Conferencing (Two-way interactive video and audio)
- One-Way Video Conferencing (One-way interactive video and two-way interactive audio)
- Computer Assisted Instruction (A specialized form of mediated instruction relying primarily on student access to information and prepared lessons or teaching materials through a computer terminal, but not under immediate supervision of a qualified instructor.)

GRADING POLICY AND STANDARDS (include methods of determining whether the stated objectives have been met by students):

Attendance/Participation	10%
Research Paper	20%
Midterms	20%
Final Exams	20%
Manipulative Skills	30%

IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE?

Yes ___ No X Number of times course may be taken for credit: 1

If yes, identify specific provision of Title 5 Division 2 section(s), 55761-55763 and 58161 which qualifies course as repeatable:

CONTACT PERSON: Brett Vanwey *1703

SIGNATURES ON FILE