PROGRAM REVIEW ANNUAL UPDATE
FALL 2009

Part III: Student Learning Outcomes Overview

Please insert a copy of the *SLO Assessment Plan and Report*.

Assessment Plan and Report

Program: Fire Protection Technology **Division (if applicable):** Applied Science
Year: 2008 **Author:** Rod L. Pavao, Department Chair
Course (if applicable): FPT051, FPT052, FPT053, FPT054, FPT055, FPT056, FPT057, FPT060, FPT061, FPT065, FPT065C, FPT065I, FPT093, AND FPT180

Plan				Report		
Program Outcomes	**Course Outcomes**	**Assessment Measures and Criteria**	**Schedule for Assessment**	**Assessment Results**	**Use of Results**	**Effect on the program**
	FPT*051 - Fire Protection Organization 1. **Outcome:** The student will demonstrate knowledge of the educational requirements, duties, and information sources for various positions available in the fire protection field. **Assessment: Quizzes, special projects, mid-term and final examination.** 2. **Outcome:** Describe the effects	80% of students will successfully complete the course with an 80% or better.	Course Outcomes will be reviewed every 4 years during Spring Semester.			

	of fire on civilization, the environment and the major cause of fires in the United States. **Assessment: Quizzes, special projects, mid-term and final examinations.**					
	FPT*052 - Fire Behavior and Combustion 1. **Outcome:** Student will describe the difference between matter and energy; the basic terminology and phenomena of chemistry as they relate to fire; and the basic laws of energy and mass. **Assessment: Quizzes, practical knowledge assessment through term papers, projects, mid-term and final examination.** 2. **Outcome:** Student will describe the three physical states of matter; the physical forces caused by fire can effect changes in the physical states of matter and compare	75% of students will successfully complete the course with an 80% or better.	Course Outcomes will be reviewed every 4 years during Fall Semester.			

	the desirable and undesirable characteristics of extinguishing agents used in fire protection. **Assessment: Quizzes, practical knowledge assessment through term papers, projects, mid-term and final examination.**					
	FPT*053 - Fire Protection Equipment and Systems 1. **Outcome:** Student will identify the types, characteristics and capabilities of portable fire extinguishers; examinations. 2. **Outcome:** Student will describe the different types of sprinkler systems; standpipe systems and alarm systems examinations	75% of students will successfully complete the course with an 80% or better.	Course Outcomes will be reviewed every 4 years during Spring Semester.			
	FPT*054 - Building Construction for Fire Protection 1. **Outcome:** Identify buildings by type of construction	75% of students will successfully complete the	Course Outcomes will be reviewed			

	according to the Uniform Building Code. 2. **Outcome:** Compare construction methods and materials affecting fire and fire spread.	course with an 80% or better.	every 4 years during Fall Semester.			
	FPT*055 - Fire Prevention Technology 1. **Outcome:** Students will identify the responsibility, authority and process for fire prevention inspections and fire cause determination. 2. **Outcome:** Students will utilize the Uniform Fire Code requirements and regulations when performing fire inspections.	75% of students will successfully complete the course with an 80% or better.	Course Outcomes will be reviewed every 4 years during Fall Semester.			

	FPT*056 – Hazardous Materials Technology 1. **Outcome:** Student will demonstrate the classifications and the safe handling of organic compounds, explosives, water-reactive, poisons and corrosive materials. Student will demonstrate the procedures involved when dealing with a fire or spill involving hazardous materials. **Assessment: Quizzes, practical skill assessment, mid-term and final examination.** 2. **Outcome:** Student will describe the procedures involved when dealing with a fire or spill involving toxic materials. Analyze the hazards associated with compressed gasses. Complete an Incident Action Plan utilizing the information from a simulated incident. **Assessment: Quizzes, practical skill tests, mid-term and final examination.**	75% of students will successfully complete the course with an 80% or better.	Course Outcomes will be reviewed every 4 years during Spring Semester.			

	FPT*057 – Rescue Practices 1. **Outcome:** Student will demonstrate knowledge of life threatening injuries, airway emergencies, and emergencies involving life threatening bleeding. **Assessment: Quizzes, practical skill tests, mid-term and final examination.** 2. **Outcome:** Student will demonstrate the steps in assessing multiple casualties, proper manual patient lifts and carries, and patient care and handling. **Assessment: Quizzes, practical skill tests, mid-term and final examination.**	75% of students will successfully complete the course with an 80% or better.	Course Outcomes will be reviewed every 4 years during Spring Semester.			

	FPT*060 – Wildland Fire Control Technology 1. **Outcome:** Student will demonstrate knowledge of fire organizations, fire problems specific to California, incident management system. Student will demonstrate how topography and weather affects wildland fires; and tools and equipment to suppress and control of wildland fires. **Assessment: Quizzes, practical skill tests, mid-term and final examination.** 2. **Outcome:** Student will demonstrate knowledge of fire line survival and safety equipment; fire line construction techniques; the use and maintenance of hand and power tools and the utilization of pumping equipment, fire apparatus and fixed and rotary aircraft. **Assessment: Quizzes, practical skill tests, mid-term and final examination.**	75% of students will successfully complete the course with an 80% or better.	Course Outcomes will be reviewed every 4 years during Spring Semester.			

	FPT*061 – Fundamentals of Fire Suppression 1. **Outcome:** Student will demonstrate the portable fire extinguishers, operate foam and water additive appliances; roll, fold, and carry hose; connect and operate nozzles, operate hydrants and master stream appliances. I **Assessment: Quizzes, practical skill tests, mid-term and final examination.** 2. **Outcome:** Student will demonstrate salvage operations, operation of tools and equipment, and the removal of debris and hazards for the safeguarding of property. **Assessment: Quizzes, practical skill tests, mid-term and final examination.** 3. **Outcome:** Student will identify types of fire service ladders; the proper carry, raise and lower of ladders; the use of ladders as improvised equipment; how to inspect	75% of students will successfully complete the course with an 80% or better.	Course Outcomes will be reviewed every 4 years during Spring Semester.			

	and operate breathing apparatus. **Assessment: Quizzes, practical skill tests, mid-term and final examination.**					
	FPT*065 - Emergency Medical Tech. 1. **Outcome:** Student will identify signs and symptoms which indicate disruption of normal bodily processes of an emergent nature. 2. **Outcome:** Student will discuss care for a patient which will improve, stabilize, or prevent deterioration of the condition.	70% of students will successfully complete the course with an 80% or better.	Course Outcomes will be reviewed every 4 years during Spring Semester			
	FPT*065L - EMT Laboratory 1. **Outcome:** Students will accurately demonstrate EMT-1 Skills proficiency according to	70% of students will successfully complete Skills Proficiency Test.	Course Outcomes will be reviewed every 4 years			

	established standards in Title 22.		during Spring Semester			
1.	**FPT*065C - EMT Clinical Experience** 1. **Outcome:** Students will provide appropriate care to patients in either the pre-hospital area or in the emergency department. 2. **Outcome:** Students will appropriately utilize pre-hospital and emergency department equipment and perform procedures as needed for patient care in these situations.	70% of students will successfully complete clinical experience.	Course Outcomes will be reviewed every 4 years during Spring Semester			
	FPT *091 – Directed Studies 1. **Outcome:** Student will demonstrate knowledge of subject in the fire protection technology field based on agreement of objectives established with the instructor. **Assessment: Quizzes, practical**	75% of students will successfully complete the course with an 80% or better.	Course Outcomes will be reviewed every 4 years during Spring Semester.			

	skill tests, term paper, mid-term and final examination may be required.					
	FPT*092 – Directed Studies 2. **Outcome:** Student will demonstrate knowledge of subject in the fire protection technology field based on agreement of objectives established with the instructor. **Assessment: Quizzes, practical skill tests, term paper, mid-term and final examination may be required.**	75% of students will successfully complete the course with an 80% or better.	Course Outcomes will be reviewed every 4 years during Spring Semester.			
	FPT*093 – Directed Studies 3. **Outcome:** Student will demonstrate knowledge of subject in the fire protection technology field based on agreement of objectives established with the instructor. **Assessment: Quizzes, practical skill tests, term paper, mid-term and final examination**	75% of students will successfully complete the course with an 80% or better.	Course Outcomes will be reviewed every 4 years during Spring Semester.			

	may be required.					
	FPT*180 - EMT Refresher Course 1. **Outcome:** Students will interpret the interrelation of various anatomical structures, and basic physiological changes when trauma or a medical emergency has occurred.	70% of students will successfully complete the course with an 80% or better.	Course Outcomes will be reviewed every 4 years during Spring Semester			