

APR Instructional Fire Science 2022-23 Latest Version

Annual program review for Fire Science reviewing the 2022-23 Academic Year

APR Instructional

Annual Course Student Learning Outcome Data : Version by Escobedo, Adrian on 01/30/2024 15:10

CSLOs	Expected/Benchmark Performance	Actual Performance (Aggregate of All Terms)
FIR101 - Fire Protection Organization		
1. Describe the educational requirements, duties, and training sources for various occupations in fire protection. (Active from Fall 2015)	70.00%	90.00%
2. Identify the basic components of fire as a chemical reaction, the major phases of fire, and the main factors that influence fire spread and fire behavior. (Active from Fall 2015)	70.00%	90.00%
3. Identify the major organizations that contribute to fire protection and define the purpose and scope of fire departments. (Active from Fall 2015)	70.00%	85.00%
4. Identify the types of common fire department apparatus, equipment, and personal safety equipment used for fire fighting. (Active from Fall 2015)	70.00%	85.00%
5. Analyze fire fighting strategy and tactics and describe the basic tenets of fire fighter safety and survival. (Active from Fall 2015)	70.00%	75.00%
FIR102 - Fundamentals of Fire Prevention		
1. Describe the origin and history of fire prevention efforts in the United States. (Active from Fall 2015)	70.00%	0.00%
2. Identify the basic fire prevention functions of a fire department. (Active from Fall 2015)	70.00%	0.00%
3. Identify and defend principles and procedures used to correct fire hazards. (Active from Fall 2015)	70.00%	0.00%
4. Analyze operational deficiencies in sprinkler systems, special fixed fire protection systems, standpipe systems, and detection and alarm systems. (Active from Fall 2015)	70.00%	0.00%
FIR103 - Fire Protection Equipment and Systems		
1. Compare smoke and fire movement in various types of construction and assess the relationship to systems and equipment. (Active from Fall 2015)	70.00%	100.00%
2. Describe organizations that provide information or service to fire protection systems. (Active from Fall 2015)	70.00%	100.00%
3. Define types, classifications, and effectiveness ratings of fire extinguishers. (Active from Fall 2015)	70.00%	100.00%
4. List types, components, and operation of fire protection systems and equipment for special hazards. (Active from Fall 2015)	70.00%	85.71%
5. Explain the application of hydraulic theory for fire protection. (Active from Fall 2015)	70.00%	85.71%
FIR104 - Building Construction for Fire Protection		
1. Define occupancy designations of the building code and list the construction classifications that correspond to designated occupancies. (Active from Fall 2015)	70.00%	0.00%
2. Differentiate between the loads that are placed on a building and describe each type of load. (Active from Fall 2015)	70.00%	0.00%
3. Define flame spread and describe its hazards, contributing factors, and possible solutions. (Active from Fall 2015)	70.00%	0.00%

CSLOs	Expected/Benchmark Performance	Actual Performance (Aggregate of All Terms)
4. Identify firefighting practices and procedures that have developed for different types of construction and describe the basic elements of firefighter safety and survival. (Active from Fall 2015)	70.00%	0.00%
FIR105 - Fire Behavior and Combustion		
1. Describe the basic laws differentiating matter and energy. (Active from Fall 2015)	70.00%	100.00%
2. Explain basic terminology, definitions, and phenomena of fire chemistry. (Active from Fall 2015)	70.00%	100.00%
3. Explain the three physical states of matter, how each is affected by fire, and describe how fire changes the physical states of matter. (Active from Fall 2015)	70.00%	100.00%
4. Identify various methods and techniques of fire extinguishment based on development of the flame plume. (Active from Fall 2015)	70.00%	83.33%
FIR106 - Principles of Fire and Emergency Services Safety and Survival		
1. Describe the need for cultural and behavioral change within the emergency services relating to safety, incorporating leadership, supervision, accountability, and personal responsibility. (Active from Fall 2015)	70.00%	85.71%
2. Evaluate circumstances that might constitute an unsafe act and explain the importance of empowering all emergency services personnel to stop unsafe acts. (Active from Fall 2015)	70.00%	85.71%
3. Defend the importance of public education as a critical component of life safety programs. (Active from Fall 2015)	70.00%	85.71%
4. Discuss the importance of fire sprinklers, code enforcement, and safety in the design of apparatus and equipment. (Active from Fall 2015)	70.00%	85.71%
FIR153 - Fire Hydraulics		
1. Describe fire pump operations and fire extinguishment theories as they relate to the properties of water and fire. (Active from Fall 2015)	70.00%	66.67%
2. Calculate the friction loss in elevation and hose assemblies. (Active from Fall 2015)	70.00%	66.67%
3. Develop fire stream strategies and tactics on the fire ground as they relate to fire hydraulics. (Active from Fall 2015)	70.00%	66.67%
FIR167 - Wildland Fire Safety and Hand Crew Operations: Basic Wildland Firefighter - (L-180, S-130, S-190)		
1. Apply correct wildland fire control methods and operations in any wildland fire situation. (Active from Fall 2015)	70.00%	100.00%
2. Analyze warning signals of potential extreme fire behavior. (Active from Fall 2015)	70.00%	100.00%
3. Demonstrate effective and safe use of wildland tools and equipment. (Active from Fall 2015)	70.00%	100.00%
4. Hypothesize how the fire environment (weather, fuel, topography) affects the behavior of wildland fire. (Active from Fall 2015)	70.00%	100.00%
FIR169 - CAL FIRE Basic Firefighter Supplemental Module		
1. Demonstrate the skills and knowledge required for the CAL FIRE Basic Firefighter Certification. (Active from Summer 2020)	70.00%	72.73%
2. Apply basic wildland firefighting and safety principles. (Active from Summer 2020)	70.00%	100.00%
FIR150C - Fire Inspector 1C		

CSLOs	Expected/Benchmark Performance	Actual Performance (Aggregate of All Terms)
1. Compare an approved plan to an existing fire protection system, in order to identify, document, and report any modifications to the system in accordance with applicable codes and standards. (Active from Summer 2022)	70.00%	0.00%
2. Demonstrate knowledge of emergency access for an existing fire protection system and determine the operational readiness for fixed fire suppressions systems. (Active from Summer 2022)	70.00%	0.00%
FIR150D - Fire Inspector 1D		
1. Demonstrate a basic knowledge of the California Field Inspector's role specific to the inspection of tents, canopies, and temporary membrane structures; fireworks and explosives; and wildland urban interface environments. (Active from Summer 2022)	70.00%	0.00%
2. Demonstrate a basic knowledge of the Field Inspector's role specific to the application and compliance of California codes, standards and jurisdictional policies of tents, canopies, and temporary membrane structures; fireworks and explosives; and wildland urban interface environments. (Active from Summer 2022)	70.00%	0.00%
FIR150E - Fire Inspector 2A: Fire Prevention Administration		
1. Identify the administrative, field inspection, and plan review duties of a Fire Inspector II. (Active from Summer 2022)	70.00%	100.00%
2. Demonstrate knowledge of permit and plan review applications, investigating complex complaints, modification of codes and standards, and identify policies, procedures, and processes for inspection services. (Active from Summer 2022)	70.00%	100.00%
FIR150F - Fire Inspector 2B: Fire and Life Safety Requirements		
1. Identify the administrative, field inspection, and plan review duties of a Fire Inspector II. (Active from Summer 2022)	80.00%	100.00%
2. Demonstrate knowledge of the occupancy classification, building construction, and fire growth potential and identify egress elements, emergency plans and procedures, and occupant loads as it relates to fire inspection. (Active from Summer 2022)	80.00%	100.00%
FIR150G - Fire Inspector 2C: Inspecting New and Existing Fire and Life Safety Systems and Equipment		
1. Identify the administrative, field inspection, and plan review duties of a Fire Inspector II. (Active from Summer 2022)	70.00%	100.00%
2. Demonstrate knowledge of the inspection of life safety systems and building services equipment, fire protection systems, and emergency access criteria. (Active from Summer 2022)	70.00%	100.00%
FIR150H - Fire Inspector 2D: Hazardous Materials, Operations, and Processes		
1. Identify the administrative, field inspection, and plan review duties of a Fire Inspector II. (Active from Summer 2022)	70.00%	0.00%
2. Demonstrate knowledge of hazardous conditions, flammable and combustible liquids and gases, and hazardous materials and protection measures to be taken to be in compliance with applicable codes and standards. (Active from Summer 2022)	70.00%	0.00%
FIR150K - ICS-300: Intermediate Incident Command System for Expanding Incidents		

CSLOs	Expected/Benchmark Performance	Actual Performance (Aggregate of All Terms)
1. List and describe ICS positions and duties. (Active from Summer 2022)	70.00%	100.00%
2. Diagram the reporting relationships with the ICS organization. (Active from Summer 2022)	70.00%	100.00%
3. Develop a sample organization around a major event. (Active from Summer 2022)	70.00%	100.00%
4. Perform tasks associated with incident planning and resource demobilizations. (Active from Summer 2022)	70.00%	100.00%
FIR150L - ICS 400: Advanced Incident Command System for Command and General Staff- Complex (Incidents)		
1. Demonstrate the ability to effectively organize, create a plan, and manage complex emergency incidents/events during classroom simulated incidents. (Active from Summer 2022)	70.00%	100.00%
2. Describe the circumstances in which multi-agency coordination systems are established. (Active from Summer 2022)	70.00%	100.00%
3. Describe Interconnectivity of NIMS Command and Coordination Structures. (Active from Summer 2022)	70.00%	100.00%
FIR150N - Firefighter I Acad Skills/Test		
1. Identify the use of the appropriate firefighting tools, tactics and strategies for given firefighting situations. (Active from Summer 2022)	70.00%	100.00%
2. Demonstrate and apply the use of fire department equipment through its selection for given firefighting skills. (Active from Summer 2022)	70.00%	100.00%
3. Demonstrate the ability to perform Municipal and Wildland Firefighter I skills. (Active from Summer 2022)	70.00%	100.00%
FIR150P - Firefighter II Academy		
1. Perform a fire safety survey in an occupied structure, in order to identify fire and life safety hazards, make recommendations to the occupant, and refer unresolved issues to the proper authority. (Active from Summer 2022)	70.00%	100.00%
2. Appropriately demonstrate the use of the following: supplies and equipment, personal protective equipment (PPE), foam proportioning devices, nozzle, foam concentrates, water supply, extinguishing an ignitable liquid fire, use of the correct type of foam concentrate. (Active from Summer 2022)	70.00%	100.00%
3. Extricate a victim entrapped in a motor vehicle as part of a team. (Active from Summer 2022)	70.00%	100.00%
4. Demonstrate knowledge and skills necessary to protect evidence of fire cause and origin using PPE and overhaul tools until investigators arrive at the scene. (Active from Summer 2022)	70.00%	100.00%
FIR150Q - Fire Mechanics Performance		
1. Identify skills utilized by an emergency vehicle technician. (Active from Summer 2022)	70.00%	100.00%
2. Identify the signs of engine problems. (Active from Summer 2022)	70.00%	100.00%
FIR162A - Professional Firefighter Training Program: Part 1		
1. Demonstrate safe and effective operations on and around firefighting apparatus. (Active from Fall 2015)	70.00%	100.00%
2. Demonstrate safe and effective use of all PPE and SCBAs. (Active from Fall 2015)	70.00%	100.00%
3. Successfully meet all mandated skills testing for professional municipal and wildland firefighters. (Active from Fall 2015)	70.00%	100.00%
FIR162B - Professional Firefighter Training Program: Part 2		

CSLOs	Expected/Benchmark Performance	Actual Performance (Aggregate of All Terms)
1. Analyze potential hazards and techniques related to water emergencies. (Active from Fall 2015)	70.00%	100.00%
2. Determine target hazards of pre-incident situations. (Active from Fall 2015)	70.00%	100.00%
3. Analyze an array of roof construction types and recommend the type of saw and sawing techniques that should be used for ventilation. (Active from Fall 2015)	70.00%	100.00%
4. Recognize ordinances and demonstrate proper fire prevention protocols. (Active from Fall 2015)	70.00%	100.00%
5. Describe techniques to contain and dispose of hazardous materials. (Active from Fall 2015)	70.00%	100.00%
FIR162C - Professional Firefighter Training Program: Part 3		
1. Demonstrate proper care, inspection, and maintenance of ropes. (Active from Fall 2015)	70.00%	100.00%
2. Analyze fire streams and recommend safety procedures. (Active from Fall 2015)	70.00%	100.00%
3. Recognize ordinances and demonstrate proper fire prevention protocols. (Active from Fall 2015)	70.00%	100.00%
4. Describe the effect of weather conditions on wildland firefighting. (Active from Fall 2015)	70.00%	100.00%
5. Describe topographical features to be considered when coordinating multiple suppression resources. (Active from Fall 2015)	70.00%	100.00%
FIR162D - Professional Firefighter Training Program: Part 4		
1. Recognize the hazards of rapidly changing conditions in swift water rescues. (Active from Fall 2015)	70.00%	0.00%
2. Demonstrate safe and effective procedures when rescuing trapped victims using ropes, boards, winches, and hydraulic adjuncts. (Active from Fall 2015)	70.00%	0.00%
3. Demonstrate proper techniques related to dropping hose, positions of safety personnel, rope bag tossing, spotters, and related resources. (Active from Fall 2015)	70.00%	0.00%
FIR162E - Professional Firefighter Training Program: Part 5		
1. Demonstrate safe and proper techniques used to contain and dispose of hazardous materials. (Active from Summer 2017)	70.00%	0.00%
2. Analyze pre-incident situations to determine potential hazards. (Active from Summer 2017)	70.00%	0.00%
3. Recognize fire ordinances and demonstrate effective and safe fire prevention protocols. (Active from Summer 2017)	70.00%	0.00%
4. Analyze the effect of weather conditions on wildland firefighting. (Active from Summer 2017)	70.00%	0.00%
5. Describe topographical features to be considered when coordinating multiple suppression resources. (Active from Summer 2017)	70.00%	0.00%
FIR163A - CAL FIRE Firefighter Training Program (Intermediate Incident Operations for the Company Officer)		
1. Initiate and deploy personnel and equipment in a variety of emergency situations. (Active from Summer 2020)	70.00%	100.00%
2. Implement the proper incident command decision making process. (Active from Summer 2020)	70.00%	100.00%
3. Identify and describe various types of fire behavior. (Active from Summer 2020)	70.00%	100.00%
FIR170D - Firefighter I Academy (South Bay JPA)		
1. Identify ways in which police, fire, and local government relate directly and indirectly with organizations in their communities. (Active from Fall 2015)	70.00%	88.64%
2. Explain the theory and fundamentals of heat transfer and combustion and describe the elements of fire. (Active from Fall 2015)	70.00%	88.64%

CSLOs	Expected/Benchmark Performance	Actual Performance (Aggregate of All Terms)
3. Coordinate the type of personal protective equipment needed for different exposures and locate the equipment on the engine. (Active from Fall 2015)	70.00%	88.64%
4. Effectively and safely operate the components, accessories, and functions of self-contained breathing apparatus. (Active from Fall 2015)	70.00%	88.64%
5. Identify the fire attack methods to combat fires as safely and efficiently as possible and describe a systematic approach to the firefighting operations to eliminate confusion and inconsistency on the fire ground. (Active from Fall 2015)	70.00%	88.64%
FIR172D - Instructor I: Instructional Methodology		
1. Define the role of the Instructor I. (Active from Summer 2017)	70.00%	100.00%
2. Construct and outline a lesson plan. (Active from Summer 2017)	70.00%	100.00%
3. Assemble and deliver cognitive and psychomotor lesson plans. (Active from Summer 2017)	70.00%	100.00%
4. Develop and administer oral, written and performance tests. (Active from Summer 2017)	70.00%	100.00%
FIR172E - Instructor II: Instructional Development		
1. Formulate a technical lesson plan to include: learning objectives, outline, course materials, instructional aids, and an evaluation plan. (Active from Summer 2017)	70.00%	100.00%
2. Demonstrate how to conduct a class using a lesson plan that was prepared by the instructor using multiple teaching methods. (Active from Summer 2017)	70.00%	100.00%
3. Develop student evaluation instruments that evaluate performance in an objective, reliable and verifiable manner. (Active from Summer 2017)	70.00%	100.00%
FIR173B - Fire Investigation 1B: Techniques of Fire Investigation		
1. Demonstrate the knowledge and skills necessary to successfully complete a fire investigation in the fire service. (Active from Fall 2015)	70.00%	100.00%
FIR180D - Specialized Training Module D: S-290 - Intermediate Wildland Fire Behavior		
1. Achieve a passing score on a final exam required by the NWCG (National Wildfire Coordination Group). (Active from Fall 2015)	70.00%	100.00%
2. Evaluate the variables that affect wildland fire behavior in an actual historic scenario. (Active from Fall 2015)	70.00%	100.00%
3. Assess the effects of fuels, weather, topography, and other environmental elements on a wildland fire. (Active from Fall 2015)	70.00%	100.00%
FIR180F - Fire Apparatus Driver/Operator 1A: Emergency Vehicle Operations		
1. Demonstrate safe and effective engine operation skills. (Active from Fall 2015)	70.00%	100.00%
2. Accurately describe the laws and responsibilities of Code 3 driving. (Active from Fall 2015)	70.00%	100.00%
3. Meet fire department promotional criteria for the State of California Operator 1A certificate. (Active from Fall 2015)	70.00%	100.00%
FIR180G - Fire Apparatus Driver/Operator 1B: Pump Operations		
1. Describe the laws and responsibilities of proper emergency driving procedures. (Active from Fall 2015)	70.00%	100.00%
2. Demonstrate safe maneuvering procedures in normal traffic situations. (Active from Fall 2015)	70.00%	100.00%

CSLOs	Expected/Benchmark Performance	Actual Performance (Aggregate of All Terms)
3. Describe basic hydraulic terms, water distribution systems, basic hydraulic principles, pump, pump system, pump panel designs, types of pump operations, and fire ground hydraulics. (Active from Fall 2015)	70.00%	100.00%
4. Meet fire department promotional criteria for the State Fire Marshal Operator 1B certificate. (Active from Fall 2015)	70.00%	100.00%
FIR181A - Company Officer 2A: Human Resource Management		
1. Compare theories of supervision, management, leadership concepts and practices in fire services. (Active from Summer 2017)	70.00%	100.00%
2. Investigate and explain the advantages, disadvantages, and effects of various recognized company officer styles of leadership and leadership profiles. (Active from Summer 2017)	70.00%	100.00%
3. Assess basic supervisory, managerial, and leadership skills required for the fire service company officer in decision making, delegating, personnel motivation, communicating, time management, resource management, record keeping, team building, disciplinary functions, and dealing with change and stress. (Active from Summer 2017)	70.00%	100.00%
FIR181B - Company Officer 2B: General Administrative Functions		
1. Explain a fire organization's purpose and mission. (Active from Summer 2017)	70.00%	0.00%
2. Differentiate unit level administrative functions, completing reports and logs, and maintaining files in accordance with policy. (Active from Summer 2017)	70.00%	0.00%
3. Analyze and compare capital, operating, and personnel costs. (Active from Summer 2017)	70.00%	0.00%
4. Identify revenue sources. (Active from Summer 2017)	70.00%	0.00%
FIR181C - Company Officer 2C: Fire Inspections and Investigations		
1. Outline a given occupancy and identify construction, alarm, detection, and suppression features that contribute to or prevent the spread of fire, heat, and smoke. (Active from Summer 2017)	70.00%	0.00%
2. Develop an occupancy pre-incident plan. (Active from Summer 2017)	70.00%	0.00%
3. Analyze and determine fire origin and cause. (Active from Summer 2017)	70.00%	0.00%
4. Demonstrate life-safety inspection of assigned occupancy. (Active from Summer 2017)	70.00%	0.00%
FIR181D - Company Officer 2D: All-Risk Command Operations		
1. Describe the principles of command. (Active from Summer 2017)	70.00%	0.00%
2. Evaluate emergency scene conditions and determine tactical priorities. (Active from Summer 2017)	70.00%	0.00%
3. Identify national, state and local resources available for mitigation of emergencies. (Active from Summer 2017)	70.00%	0.00%
4. Construct a post incident analysis. (Active from Summer 2017)	70.00%	0.00%
5. Dramatize incident actions on various emergency situations. (Active from Summer 2017)	70.00%	0.00%
FIR181E - Company Officer 2E: Wildland Incident Operations		
1. Analyze and size up a wildland incident. (Active from Summer 2017)	70.00%	100.00%

CSLOs	Expected/Benchmark Performance	Actual Performance (Aggregate of All Terms)
2. Formulate an incident action plan. (Active from Summer 2017)	70.00%	100.00%
3. Determine appropriate fire suppression actions when deploying resources. (Active from Summer 2017)	70.00%	100.00%
4. Explain mop-up and extinguishment procedures. (Active from Summer 2017)	70.00%	100.00%
5. Demonstrate, through simulation, the ability to implement a plan of action and to manage initial actions at a WUI incident. (Active from Summer 2017)	70.00%	100.00%
FIR182A - Chief Fire Officer 3A: Human Resource Management		
1. Describe the human resource requirements related to the roles and responsibilities of a Chief Fire Officer. (Active from Summer 2017)	70.00%	0.00%
2. Apply the requirements of the California Firefighters Procedural Bill of Rights Act to the roles and responsibilities of the Chief Fire Officer. (Active from Summer 2017)	70.00%	0.00%
FIR182B - Chief Fire Officer 3B: Budget and Fiscal Responsibilities		
1. Develop a budget management system to keep the division or department within the budgetary authority. (Active from Summer 2017)	70.00%	0.00%
2. Outline a divisional or departmental budget, determining and justifying capital, operating, and personnel costs. (Active from Summer 2017)	70.00%	0.00%
3. Describe the agency's process for ensuring competitive bidding, including developing requests for proposal (RFPs) and soliciting and awarding bids. (Active from Summer 2017)	70.00%	0.00%
FIR182C - Chief Fire Officer 3C: General Administrative Functions		
1. Design a community risk reduction program. (Active from Summer 2017)	70.00%	100.00%
2. Develop a life safety program based on legislation, public education or a new fire safety code. (Active from Summer 2017)	70.00%	100.00%
3. Analyze and interpret fire records and data. (Active from Summer 2017)	70.00%	100.00%
FIR182E - Chief Fire Officer 3D: Command		
1. Develop a plan for integrating fire services resources in the community's emergency management plan, ensuring that the role of the fire service complies with local, state/provincial, and national requirements. (Active from Summer 2021)	70.00%	0.00%
2. Prioritize and supervise multiple resources and deploy them in accordance with the incident action plan and agency policies and procedures. (Active from Summer 2021)	70.00%	0.00%
3. Prepare, review, validate, modify, and document an incident action plan for each operational period, determining, assigning, and placing the required resources to mitigate the incident, and applying strategies and tactics according to agency policies and procedures and incident objectives. (Active from Summer 2021)	70.00%	0.00%
4. Develop and conduct a post-incident analysis in order to identify and communicate all required critical elements, and complete and process appropriate forms in accordance with policies and procedures. (Active from Summer 2021)	70.00%	0.00%
FIR191M - Special Topic: Lake Tahoe Basin Fire Academy, Part A		

CSLOs	Expected/Benchmark Performance	Actual Performance (Aggregate of All Terms)
1. Operate within the Incident Command System (ICS) in accordance with state and federal regulations. (Active from Winter 2023)	70.00%	0.00%
2. Demonstrate proficiency in the donning and doffing of the personal protective ensemble, SCBAs, and related equipment used by fire fighters. (Active from Winter 2023)	70.00%	0.00%
3. Describe common building materials and construction types and identify dangerous building conditions created by fire. (Active from Winter 2023)	70.00%	0.00%
4. Identify the major tools used in the fire service, and describe the purpose or function of each tool. (Active from Winter 2023)	70.00%	0.00%
5. Demonstrate the proper way to clean, inspect, and return fire hose to service so that damage is noted and corrected, the hose is clean, and the equipment is placed in a ready state for service. (Active from Winter 2023)	70.00%	0.00%
FIR191N - Special Topic: Lake Tahoe Basin Fire Academy, Part B		
1. Identify the regulations and industry standards relating to confined-space incidents. (Active from Spring 2023)	70.00%	0.00%
2. Investigate the First Responder Operations role at a hazardous materials incident. (Active from Spring 2023)	70.00%	0.00%
3. Analyze environmental factors that influence wildland fire behavior and explain the various methods of wildland fire attack, and list the tools and equipment required to safely accomplish each tactic. (Active from Spring 2023)	70.00%	0.00%
4. Safely and efficiently extinguish a passenger vehicle fire while avoiding the hazards associated with the vehicle's safety restraint systems. (Active from Spring 2023)	70.00%	0.00%
FIR191JQ - ST: Firefighter I Cert Test		
1. Identify the Firefighter I certification track and capstone task book requirements. (Active from Spring 2021)	70.00%	0.00%
2. Demonstrate the ability to perform Municipal Firefighter I skills. (Active from Spring 2021)	70.00%	0.00%
3. Demonstrate the ability to perform Wildland Firefighter I skills. (Active from Spring 2021)	70.00%	0.00%
4. Demonstrate the ability to perform Hazardous Materials First Responder Operation skills. (Active from Spring 2021)	70.00%	0.00%

APR Questions Tableau : Version by Deeds, Brad on 02/01/2024 00:20

Using the Data Provided (<https://10az.online.tableau.com/#!/site/ltcc/views/ProgramReview/LTCCProgramReviewSummary?:iid=1>) please provide the number of students (headcount) that are served by the discipline.

2,840

Using the Data Provided (<https://10az.online.tableau.com/#!/site/ltcc/views/ProgramReview/Demographics?:iid=1>), identify the populations served by the discipline. Are there any inconsistencies? Does the Population served reflect the population of the college? If not, why, and how can the discipline serve a population more reflective of our community?

In Fire Academy there is under-representation of female cadets as well as a performance gap. South Bay RSPTC data show an under-representation of Hispanic/Latinx students.

Using student success data (<https://10az.online.tableau.com/#!/site/ltcc/views/ProgramReview/SuccessRatesOverall?:iid=1>), identify any trends in successful completion of courses.

Are there particular courses (<https://10az.online.tableau.com/#!/site/ltcc/views/ProgramReview/SuccessRatesbyCourse?:iid=1>) students are struggling in?

Are there any demographics that are less likely to complete certain courses in the discipline?

What steps need to be taken to support students and the department in meeting its equity obligations?

In Fire Science there is success gap for Hispanic/Latinx students that warrants further exploration; In Fire Academy there is a slight equity gap identified in success rates for Hispanic/Latinx cadets. These will be discussed at the upcoming Fire Science advisory committee in Spring 2024, with potential remediation options to include recommending Fire instructors consider attending the Cultural Fluency Teaching Academy and other potential DEI trainings.

Are there any courses lacking Title V Updates?

If so, how many and why?

(Please check your courses in eLumen for the most recent list of courses that require updates.)

There are 4 or 5 courses overdue for Title V updates in Fire Science, however none of those courses are currently scheduled or have been scheduled in recent years.

Describe the approach to scheduling in terms of offering a balance of Face to Face (F2F) and Online opportunities for students.

Scheduling is done in partnership with industry partners to ensure a balance of f2f, hybrid and distance education courses. Fire Academy is primarily F2F, most Fire Science is DE, and other courses in the department are a mix of modalities.

Are there any insights specific to this discipline regarding scheduling modality in terms of success rates, student retention, or course cancellations?

Other than the equity gaps listed above, there are not identifiable success gaps dependent upon modality as per a review of the data.

Are the full-time faculty teaching the courses with the most face to face students? Why/why not?

There are no full time faculty in Fire Science, Fire Academy, Fire Officer, Fire Instructional Service Agreements, or South Bay Regional Public Safety Training Center.

Are staffing levels adequate to fulfill the purpose of the program?

Staffing levels continue to remain a serious challenge in Fire Academy and Fire Science, particularly in the former which is reliant upon part-time academic faculty with full-time jobs in the industry. Many personnel are pulled into duty or overtime at the last minute, creating difficulty in coverage on a week to week, and quarter to quarter basis. This extremely large and complex department would benefit from full-time faculty in the immediate future. The limit of hours and units per quarter for part-time staff and faculty is continually problematic in covering current offerings and meeting program state mandates, as well as limiting future expansion opportunities.

What professional development opportunities have faculty in this discipline taken advantage of? Are there any unmet professional development needs?

Fire Academy staff regularly attend the California Fire Technology Directors Association (CFTDA) meetings and other regional trainings.

Where applicable, outline and explain any budget shortfalls for this discipline.

Currently the program is adequately funded with various grants and state resources. The department is currently seeking significant additional funding in support of the construction of the Tahoe Basin Public Safety Training Center.

If additional financial resources are needed, please describe how they will increase student success, retention, or completion.

With a Tahoe Basin Public Safety training Center, Fire Science students will be able to conduct lab on site and deepen their contact knowledge without having to travel 45-90 minutes to access training locations as is currently required on a twice-weekly basis.

Using the SLO Data above, are there any SLOs for any particular courses that students are not successfully understanding? How do you plan to address this?

Currently the SLOs appear to be correctly aligned to instruction and students appear to be performing at the expected level.

What are the major strengths of your department?

Part-time Fire Academy personnel are extremely knowledgeable and dedicated to the program. They have forged and rebuilt agency partnerships to expand adjunct faculty ranks as well as create direct communication links with California State Fire Training personnel to ensure continued accreditation and program compliance.

In what ways could your department improve to better meet the needs of the College and support student success?

Industry partnerships, faculty that are currently employed in the field, diverse student groups, access to real-world experience and training, career pathways, and significant resources and funding.

What are the biggest challenges your department may face in making these improvements?

The department could offer more face to face local field work opportunities and continue to recruit diverse industry professionals to act as instructors and expand sections to students and industry professionals individuals in the Fire Science field.

Identify any other questions, comments, suggestions, or concerns you may have.

Lack of facilities could lead to disruption in programming in Fire Academy in the immediate future. The South Tahoe Airport is not available at present for non-aeronautical use, Carson Airport training facilities may no longer be an option going forward as Western Nevada College has recently added a Fire Academy and Truckee Meadows is running two academies at a time. Alpine County is not an option for training which could result in the Fire Academy going dark until facilities and training grounds are secured.

Dean Review : Version by **Deeds, Brad** on **02/01/2024 00:21**

Brad Deeds