

# 2020-2022 Fire Technology Program Instructional Program Review

## **LASSEN COMMUNITY COLLEGE**

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Accepted by Consultation Council: January 9, 2023

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## Executive Summary

*The executive summary should be a consolidation of key findings, program plans, and participants that contributed to the review.*

The Fire Technology Program has made substantial progress since the last IPR. In the previous IPR cycle the program made modest gains including provision for a pathway to degree for incarcerated students employed with the CCC/HDSP Fire Department, Fire Training classes for free staff and maintenance of incarcerated Firefighter training through the Cal Fire Susanville Training Center. These 2 programs have been managed very successfully by our program's Instructional Site Coordinator, Anna Pasqua. Anna has been instrumental in the success of our program both with the incarcerated side as well as the on-campus program. She has also been invaluable in the compiling of information for this IPR.

In May 2020, LCC filled the Fire Technology Program Director/Instructor position, and our on-campus program has showed substantial gains. Due to changes in our course offerings, the program has continued to see growth in on-campus programming and on-campus student enrollment in Fire classes. Our student success and retention rates remain high and have grown over the duration of this current IPR timeframe.

The Program has changed the offerings over the past 2 years to meet the needs of many different types of agencies that each have their own requirements and needs.

- **Local Volunteer agencies** have supported our program from the beginning and provide many students to our program. Scheduling for volunteers is different than professionals due to the inability of volunteers to take time from work for classes. Therefore, volunteer classes are usually scheduled for weekends including any 40-hour long classes that are offered in a split weekend schedule. These classes are normally skill based and short term. The program offers the driver operator series in a split weekend format. Due to the variability of volunteer needs the director is in contact with most local Chiefs and will schedule classes for volunteers on an as needed basis.
- **Professional Fire Fighters** are another category of student for the program to cater to. These students typically are looking for much the same classes as volunteers but in a different format. Classes for professional FFs typically are 40 hours long and offered in a weeklong M-F format. These classes consist of career development classes such as the company officer series, Driver operator series, rope rescue and vehicle extrication as well as some advanced wildland classes. Students from this category typically come from the Cal Fire JAC program or Municipal Fire Departments. We have modified our course offerings for these fire fighters to complete the JAC series or the Fire Officer series within 2 semesters. This programming has been met with some success as our enrollment in these classes has held steady for the past 2 years.
- **Federal Fire agencies** also look to us to provide training for entry-level firefighters. This comes in the form of National Wildfire coordinating group (NWCG) classes that are standardized nationally. LCC provides a majority of the training for their entry

- level FFs and the NWCG career development classes are provided by the USFS local forest through an instructional agreement that was signed by LCC in the Fall of 2021.
- **Lassen College degree track students** are part of our programing as well. Our students are able to take any of the above-mentioned classes as long as they meet the prerequisites. There are many entry level skill based elective classes that our students take to qualify for employment with our partnered agencies. In addition to our on-campus degree program we are supporting a parallel degree program at the High Desert prison Firehouse. Supporting these 2 parallel programs demands a large number of adjunct instructors and is very challenging. However, the prison program has produced at least 2 or more-degree recipients each year. Most of these students have gone on to further their fire careers upon release from prison. Our on-campus degrees have remained steady at 1 or 2 per year over the last 2 years. The program is developing feeder programs to generate interest in a fire degree. Our enrollment in core classes has increased over the last 2 years as a result of these feeder programs. We have also changed our scheduling of the core classes to accommodate athletic practice schedules in response to coaches saying they have athletes that may be interested in the program. We made this change in Fall 2022 and have only seen limited interest from the athletes but may build over the next few semesters. Over the course of the last 2 years the program has developed 3 pathways into our degree program. The Cal fire Academy is the most successful as there are a few out of each class that return and enter into the degree program. The High School pathways also looks to have some promise as 3 out of the 5 from the original program in 2021 have returned to the degree program. We were unable to continue the pathways due to lack of instructors. The Susanville Indian Rancheria fuels crew is the 3<sup>rd</sup> feeder program into our degree track. This has just recently developed and we are hoping to convince some of their crew that a degree is a valuable tool. Developing additional feeder programs will be a priority for the program in the next few years.

Overall, our statistics look very good. On campus Class enrollment, student success and SLO success is up over the course of the last 2 years. With the closure of CCC prison we will be losing the FS-60A basic firefighter class that has brought in up to 1700 students in the 18/19 academic year. Over the past 2 years the enrollment has been declining for this class due to COVID and the slow phasing out of the program. This is a big loss for the program as we will not be able to maintain our FTEs. The Fire program is seeking ways to counter act that loss but won't be able to replace those large numbers any time soon.

Fire Technology Program Student survey data was unavailable due to adjustments in institutional studies staff. The Fire Technology Office kept hard copies of Fire Technology course student surveys for courses from Fall 2020 thru Spring 2022 (see Attachment D). Overall, these surveys support the program success, and are available in the Fire Technology office upon request.

### Program Needs:

- 1) The Fire program has been able to expand our course offerings entirely with the help of adjunct instructors. There has been occasions when a class or program has had to be rescheduled or cancelled due to our adjuncts being over the allotted instructional load. Over the past 2 years a few of our adjuncts have taken promotions and/or moved out of the area. This has limited their availability and consequently added more work to the existing staff or limited our course offerings. Hiring A full time instructor would return the program to a full schedule and increase the probability of expanding the program.
- 2) Maintaining our old apparatus has proven to be expensive and problematic. Our engines are showing the signs of being in the elements for years and deferred maintenance has made repairs difficult and never ending. The cost of maintaining these old engines is rapidly outpacing their usefulness. These engines are an important piece of our program allowing us to offer the driver operator series to students from outside the area as well as supporting our skill based classes. The director is working on negotiating with a couple of local agencies to have 2 engines donated to the program. The Driver/Operator Series(FS-65A and B) have been identified as an expanding program and should be supported as best as we can.
- 3) The Cal Fire Academy, FS-60 ,is also a program that has potential to expand. Currently we are limited by adjunct instructors to be Instructors of record for the class. The Class is supported by Cal Fire Instructors but the program needs an LCC instructor to schedule, supervise and assist with instructing for the class.
- 4) To support the Cal Fire Academy, the program will need an investment in training props. In 2021 the program bought a roof ventilation prop which is the base for additional props that can be purchase separately and attached in a modular system. A purchase of a ceiling training prop would improve our training capabilities for the Cal Fire Academy as well as the FS-98.21 Volunteer academy.
- 5) Additionally, there are a few classes that will require additional equipment to support the curriculum and the Student Learning Objectives

As a whole the on campus and High Desert Firehouse programs are actually doing quite well. If you take out the loss of the FS-60A classes, the program has seen a net gain in enrollment and shown a very high success rate and retention rate. Our success is not only seen through certificates and degrees but also and more critical to the community is our success rate in getting our students employed in the fire service. We achieve this through many avenues including Cal Fire, US Forest Service, Bureau of land Management, Susanville Indian Rancheria, Local Fire Contractors and Local Volunteer Fire Agencies.

If anything could be improved upon for measuring Instructional effectiveness it would be finding a way to capture employment statistics after students leave the program. This is an important measurement for our program as not all of our students are interested in a degree. Anecdotally, we have tracked almost 75 students through our program and into employment over the last 2 years but have no way of validating this.

### **Future Plans for our program include:**

- Completion and implementation of the Forestry degree
- Develop partnerships with private Forestry companies such as SPI and Collins Pines
- Implement an internship program and possible additional route for employment
- Find and hire adjunct Forestry Instructors
- Continue developing the partnership with SIR and support their fuels/Fire crew
- Increase advertisements and social media presence
- Hire full time fire instructor and recruit additional adjunct instructors
- Offer online and Hybrid degree track classes to increase enrollment

## **SECTION 1: ACADEMIC PLANNING**

### *Program Overview, Objectives, and Student Learning Outcomes*

- *Describe the program (types of degrees offered, jobs/industries/transfer pathways associated with the program, faculty members in program)*
- *Describe and evaluate the program objectives against the LCC strategic plan, specifically the mission statement and strategic goals*
- *Evaluate any changes in the program since last review. Include summary of Annual Updates completed since last review. Regular program assessment will drive program improvements.*

### **PROGRAM DESCRIPTION:**

Lassen Community College Fire Technology Program (LCC FTP) is designed to provide skills and knowledge needed to prepare students for successful employment in the Fire Service. The Fire Technology Program provides excellent instruction to both entry-level students and fire service professionals continuing their training to progress in both urban firefighting and Wildland fire suppression. Depending on their professional goals, Fire Technology Students can earn an Associate of Science Degree in Fire Technology, a Certificate of Achievement in Fire Technology, a Certificate of Achievement in Basic Wildland Firefighting and a Certificate of Accomplishment in Cal Fire Academy (FF1A, FF1B, FF1C, Cal Fire Orientation), or may participate in stand-alone fire courses that provide needed industry-based certifications. These pathways allow LCC FTP to serve a number of populations including:

- **CCC/HDSP Firehouse (incarcerated):** Providing access to our AS degree and Certificate in Fire Technology for incarcerated students employed at the High Desert State Prison (HDSP) Fire Department (Firehouse). According to Hughes and Wilson (2020) *“At least 95 percent of people in prison will eventually be released, and their ability to access and complete some form of a college degree or credential will increase their chances of overcoming post-incarceration barriers. Going from prison to earning a college degree or credential opens the doors to new possibilities of careers, economic mobility, housing, health care, civic engagement, and the uplifting of entire families and communities.”*
- **Local community members interested in entry into the fire service.** Our Basic Wildland Firefighter, Fire Technology and Fire Academy certificates provide training needed for entry-level firefighting positions. Graduates are employed with agencies such as the United States Forest Service, Bureau of Land Management, Cal Fire as well as in local departments.

- **Professional and Volunteer firefighters seeking to attain industry based certificates, and professional contractors looking to maintain their industry certificates.** For example, we are able to offer Cal-JAC courses needed by local Cal Fire professional firefighters, and we continue to offer stand alone Incident Safety Awareness class for Heavy Equipment Operators requiring industry based certification to work on the fire line as private contractors.
- We maintain an ongoing partnership with **Federal agencies** such as USFS and BLM to provide training to their fire employees. Classes that these agencies participate in include National Wildfire Coordinating group courses that are offered through our instructional contract's with the agencies.
- Our **Susanville Indian Rancheria partnership** offers the Wildland Firefighter Certificate training to the newly formed SIR fuels management and fire crew.
- Fire Courses offered for Professionals in the Fire Service can be found in the Appendix B.

While the primary goal of the LCC FTP is employment and Fire Technology students who complete our certificates meet federal and state requirements for entry-level firefighting positions; students may continue beyond our AS Degree with additional classes to transfer to California State University or University of California offering Bachelor and higher level degrees.

We enjoy multiple partnerships with fire agencies such as United States Forest Service, Bureau Of land Management, Cal Fire, Lassen Modoc Unit, Lassen County Fire Officers Association, and we have become a part of the fire training for the new Susanville Indian Rancheria Fire Crew who provide employment opportunities for our Fire Technology students. Positions that students can be employed in include: Entry level Firefighter, Fire Captain, Apparatus Operator/Engineer, Fire Prevention inspector, Hot Shot, Code Enforcement, Pubic Education, and various private industry prevention and suppression opportunities.

LCC FTP currently includes (58) Individual courses which have been streamlined from the (64) listed in the last review based on the latest industry standards and needs of our local agency partners. Classes are updated to meet industry standards including federal and state requirements through National Wildfire Coordinating Group (NWCG), Office of Fire Marshal, State Fire Training (SFT) compliance.

## **Objectives for the Fire Technology Program:**

The Fire Technology Program prepares students for employment in the Fire Science industry. The Associate Degree in Fire Technology degree and Certificate of Achievement in Fire Technology provide students and employers with certifiable standards of technical career proficiency. The Basic Wildland Certificate of Achievement and the Cal Fire Academy Certificate of Accomplishment provide training that meets industry standard for entry -level employment as a firefighter, and stand-alone courses provide professional Fire Service personnel with needed industry based certifications to enhance knowledge and skills that can be effectively implemented in their professions. The curriculum provides for training skills and techniques as follows:

- a. Working knowledge and understanding of fire positions to include Firefighter, Fire Inspector, Fire Investigator, Supervisors and Managers.
- b. Workplace safety and orientation
- c. "Work ethic" attitudes, principles, responsibility, discipline and initiative.
- d. Technical language, vocabulary, equipment, materials and modes of operation.
- e. Broad background in the mental and physical skills necessary to operate in the world of firefighting.
- f. Professional Development for career success

## **Program Student Learning Outcomes:**

Upon completion of the Associate in Science Degree in Fire Technology, and the Certificate of Achievement in Fire Technology, the student will be able to:

1. Safely perform basic firefighting skills as part of the Incident Command System in preparation for an entry-level position at most firefighting agencies.

Upon completion of the Basic Wildland Firefighter Certificate of Achievement, the student will be able to:

1. Demonstrate an understanding of Basic Wildland fire terminology, firefighting methods and safe and efficient use of firefighting tools.
2. Explain, in detail, the organization of fire agencies and how the chain of command is used at incidents and day to day operations.
3. Apply critical thinking skills to ever changing situations such as crew dynamics, and wildland and all risk fire and rescue incidents
4. Be academically and physically prepared to obtain an entry-level position in any of the wildland organizations, and be a productive and motivated member of a fire crew.

Upon completion of the Cal Fire Certificate of Accomplishment, the student will be able to:

1. Function effectively, safely, and cooperatively as a member of a wildland fire suppression crew; develop skills in the use of tools for wildland fire suppression and their maintenance.

**The Fire Technology Program's mission and goals support Lassen Community College's Mission Statement and Strategic Goals in the following ways:**

**LCC Mission**

*Lassen Community College provides outstanding programs for all pursuing higher education goals. The core programs offer a wide range of educational opportunities including transfer degrees and certificates, economic and workforce development, and basic skills instruction. The College serves diverse students, both on campus and in outreach areas in its effort to build intellectual growth, human perspective and economic potential.*

**Fire Technology:**

- Provides students with diverse educational opportunities and several pathways for success and employment.
- Serves a large area which attracts a wide range of students from different socioeconomic economic backgrounds.

**LCC STRATEGIC GOALS:**

- 1. Institutional Effectiveness:** *Provide the governance, leadership, integrated planning and accountability structures, and processes to effectively support the learning environment, while ensuring responsible stewardship of public trust and resources.*

**Fire Technology:** Program direction is dictated by an advisory committee. Overall program is managed by a Director who is held accountable to both the Advisory Committee, Lassen College Administration, Faculty and LCC students.

- 2. Learning Opportunities:** *Provide an array of rigorous academic programs delivered via a variety of modalities that promote student learning and meet the needs of the local and global community.*

**Fire Technology:** Offers a variety of classes to meet the needs of our students. From entry level to professional development classes, the program is designed to meet the needs of our fire community.

- 3. Resource Management:** *Manage human, physical, technological and financial resources to sustain fiscal stability and to effectively support the learning environment.*

**Fire Technology:** Director determines needs of the program through instructor and advisory committee input then prioritizes and allocates resources accordingly.

- 4. Student Success:** *Provide a college environment that reaches-out-to and supports students, minimizes barriers, and increases opportunity and success through access and retention to enable student attainment of educational goals including completion of degrees and certificates, transfer, job placement and advancement, improvement of basic skills, and self-development through lifelong learning.*

**Fire Technology:** ensures students success by providing guidance and learning opportunities from initial contact and counselling to successful employment. Connects



students with employment opportunities through our community partnerships with local, State and Federal fire agencies.

### Identify and Evaluate the Program Student Learning Outcomes

All Program Student Learning Outcomes link to the Institutional Student Learning. Outcomes in the following ways:

**Communication Skills** – *Ability to listen and read with comprehension and the ability to write and speak effectively:*

**Fire Technology:** students are required to be able to effectively communicate both verbally and in writing. Program faculty require students to prepare written reports, conduct research and make oral/written presentations, employing logic and argument to support conclusions.

**Critical Thinking** – *Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome:*

**Fire Technology:** Students are taught problem solving skills and are exposed to a variety of scenarios and incidents. Instructors assist students with working through the steps of problem solving and understanding the ramifications of decisions.

**Life Long Learning** – *Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems:*

**Fire Technology:** Students learn how to research issues and evaluate the validity of information through the use of textbooks, periodicals, library resources, and internet resources. Additionally, students may input data and complete reports using various sources of technology such as computers, portable communication devices and the internet.

**Personal/Interpersonal Responsibility** – *Ability to develop and apply strategies to set realistic goals for personal, educational, career, and community development; ability to apply standards of personal and professional integrity; ability to cooperate with others in a collaborative environment for accomplishment of goals; ability to interact successfully with other cultures:*

**Fire Technology:** Students are instructed in ethical decision making and problem solving and are expected to exhibit ethical values and take personal responsibility in coursework attempted. Faculty, with many years of experience maintain professional contacts with industry representatives and are able to channel motivated and qualified students into jobs in which basic skills and classroom theory that can be applied in real world situations. Further, students are encouraged to challenge themselves by competing in selection processes for positions in the Fire service and often receive personal mentoring from faculty members. Students are encouraged

**to act in a professional manner and treat all members of the public with respect and dignity.**

**Evaluate any changes in the program since last review:**

Since completion of the last program review, LCC FTP experienced the Covid -19 pandemic, and large devastating wildfires in our local area. Despite these challenges, LCC FTP continued to create, develop and deliver needed Fire training for each of our local populations.

One of the most notable accomplishments has been the renewal of our agreement with the United States Forest Service. Due to the Covid-19 pandemic much of the USFS training went online; however, in the Spring 2022, we were able to provide fire classes to USFS employees through our agreement and look forward to continuing our re-established partnership with the USFS.

In 2021, LCC FT began offering courses to local high school students through the dual enrollment process and we had 3 students from this class who continued on to pursue the Cal fire certificate or AS degree as students at LCC. Due to lack of instructor availability, we were not able to continue separate classes through the pathways program, but did offer high school students the chance to join already existing courses.

We continue to build our program, but are limited by a lack of instructors willing to teach for LCC. The addition of a full-time Fire Faculty member to our existing staff would increase the reliability of our offerings and would allow for needed expansion of our program.

Especially due to the rise in large Wildfires in our local areas, LCC FTP has seen an increase need for firefighter training and thus we have experienced an increase in our on-campus programming. We established a series of coursework for local high school seniors to have training in the fire service. In order to reach a broader population, we have increased the frequency of some of our introductory Fire courses. For instance, FS 61 Basic Fire Fighter (basic 32) class which includes all of the needed NWCG Industry certifications to enter into entry level federal firefighter positions to be offered twice a year. We have also increased the frequency of our FS 5-Fire Orientation and organization class to be offered every Fall, and have altered the times at which we offer many of our core classes in order to accommodate athletes attending Lassen College that may be interested in joining the fire service.

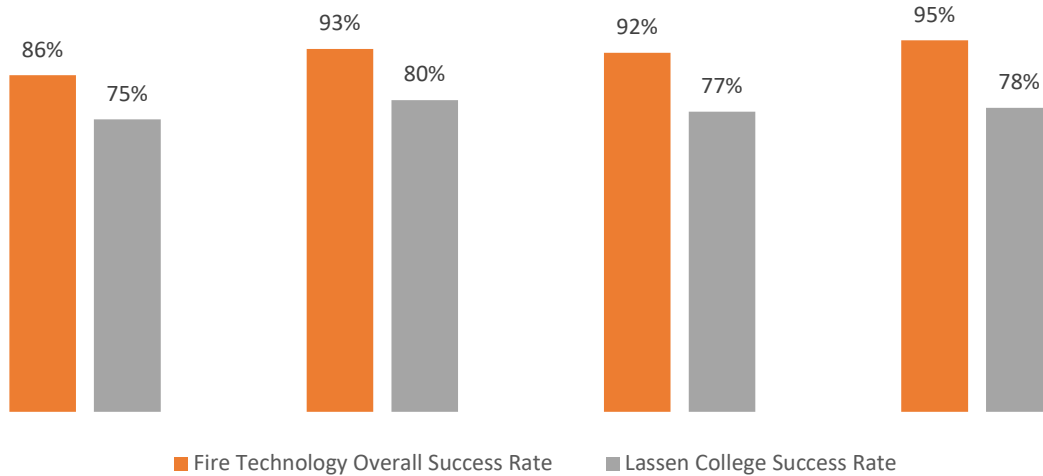
Our fire courses have been instrumental in assisting to provide trained personnel to combat large wildfires in our local areas such as the Dixie fire. For instance, with the long duration of that fire, many heavy equipment operators were being timed out on the fire thus creating an immediate need for more trained operators in our local area. LCC FTP was in position to add an additional section of our Incident Safety Awareness for Hire Vendors class needed to meet State Fire Training standards to accommodate for the needed personnel helping to bring that fire under containment. Additionally, despite the Covid -19 pandemic, LCC FTP continued to provide needed coursework and firefighter training to the majority of populations associated with our program including supporting the training of Incarcerated Firefighters that provided emergency response. After initial training, they would move to fire camps, and we offered training with our CCC/HDSP Fire Department thus enhancing local community emergency response.

The program has seen substantial growth in our programming and career pathways. In the 2021-2022 academic year, we added an additional Cal Fire Academy in Alturas, CA and have continued to offer two academies since. Due to updates in Cal Fire requirements the courses in the academy have gone through some adjustments including additional hours being added to the FS 60 now known as The Cal Fire Firefighter Academy. The units were also increase to 5.0 units. Beginning in the Fall 2022, these hours provided the training for the new Cal fire training modules including FF1A Structural Firefighting, FF1C Wildland Module and Orientation module. Additional FF1B Haz Mat module is met by our FS 72 Has Mat First Responder Operations class. These modules are new and more adjustment is expected in the future.

In Spring 2022, we have been able to provide firefighter training for the new Susanville Indian Rancheria Fire crew and will look to continue this training in the Fall 2022. If these students continue in our program, they will become eligible for the Wildland Certificate of Achievement.

## Student Achievement and Learning Outcomes Trends and Patterns in Student Achievement

### Course Success Rate



Course Success Rate	2018-19	2019-20	2020-21	2021-22
<b>Program-Level</b>				
Fire Technology Overall Success Rate	86%	93%	92%	95%
Lassen College Success Rate	75%	80%	77%	78%
<b>Course-Level</b>				
EMT 21	83%	88%	89%	88%
FS 13	33%	100%	92%	100%
FS 14	72%	72%	100%	100%
FS 156	-	-	100%	-
FS 20	-	-	88%	94%
FS 23	-	-	-	100%
FS 26	-	100%	-	-
FS 3	67%	96%	80%	100%
FS 4	0%	100%	92%	81%
FS 49	100%	92%	95%	88%
FS 5	60%	100%	86%	87%
FS 50	-	100%	100%	100%
FS 51	100%	-	100%	92%
FS 57	100%	100%	100%	100%
FS 59	100%	100%	100%	100%
FS 6	27%	-	85%	100%
FS 60	-	-	84%	92%
FS 60A	87%	92%	88%	89%
FS 61	90%	-	90%	97%
FS 64	-	100%	88%	100%
FS 64B	-	-	100%	-

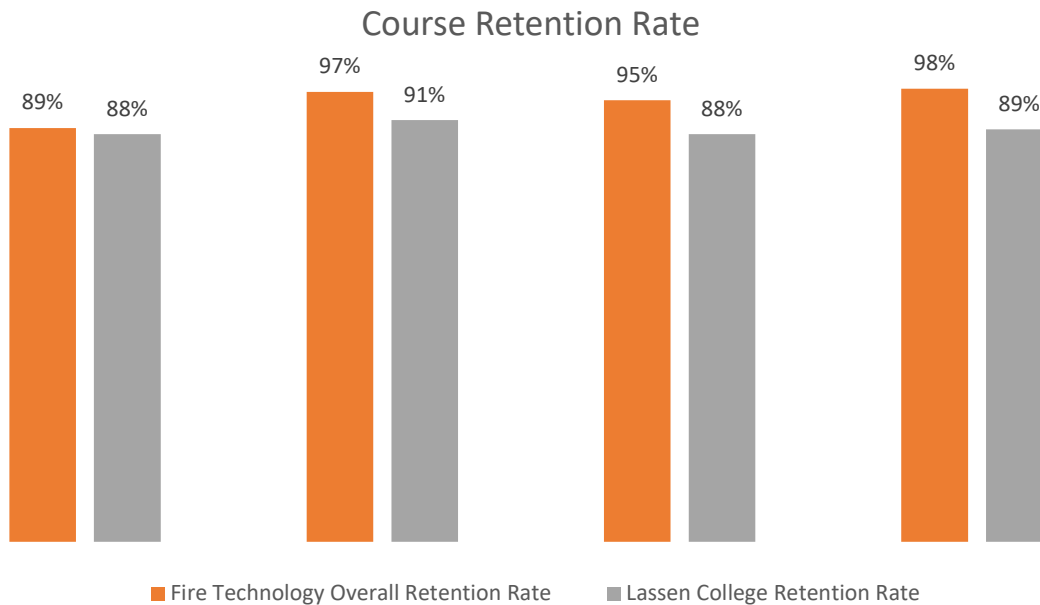
FS 65A	100%	100%	100%	100%
FS 65B	100%	100%	100%	100%
FS 65C	-	100%	-	100%
FS 70	100%	-	-	-
FS 70A	100%	-	-	-
FS 72	100%	100%	100%	96%
FS 72B	-	-	100%	-
FS 73A	-	-	-	100%
FS 74	100%	100%	-	100%
FS 75	100%	-	-	100%
FS 78	-	-	-	100%
FS 8	-	-	75%	100%
FS 80	100%	100%	100%	100%
FS 81	-	100%	100%	97%
FS 85	-	-	100%	96%
FS 89	-	92%	100%	94%
FS 90	-	100%	100%	100%
FS 92A	-	-	100%	100%
FS 92B	-	-	100%	100%
FS 92C	-	-	100%	100%
FS 92D	-	-	-	100%
FS 92E	-	-	-	100%
FS 94	-	-	-	100%
FS 95	-	-	100%	-
FS 96	-	100%	100%	95%
FS 97	-	-	100%	100%
FS 98.21	100%	100%	81%	94%
<b>Modality</b>	-	-	-	-
Correspondence	-	-	-	-
Face-to-Face	86%	93%	92%	95%
Online	-	-	-	-
Hybrid	-	-	-	-

**Discussion:** The increase in success and retention starting in 2018 is due to the introduction of several new classes that are lab based and dynamic. The new classes were introduced in 2018 which corresponds with the chart. These hands-on types of classes are sought after by firefighters and have a high success rate. Additionally, our students are professionals seeking professional development or entry level students that want to have the training to gain employment. Either way the students want to be in class and are motivated to complete the short-term classes to meet their needs. This motivation accounts for the high success rate in the elective classes and why the success rate in our core classes is slightly below 100%. In general, the Fire Technology program meets or exceeds the guidelines for retention and success. It will be our goal to maintain the numbers.

## Student Success Rate

Success Rate by Student Demographic	2018-19	2019-20	2020-21	2021-22
<b>Program-Level</b>				
Fire Technology Overall Success Rate	86%	93%	92%	95%
Lassen College Success Rate	75%	80%	77%	78%
<b>Gender</b>				
Female	64%	91%	97%	97%
Male	87%	93%	92%	95%
Unreported	50%	100%	100%	100%
<b>Ethnicity-Race-Ancestry</b>				
American Indian or AK Native	84%	98%	96%	96%
Asian	92%	96%	94%	83%
Black or African American	82%	87%	89%	85%
Filipino	87%	90%	100%	100%
Hispanic or Latinx	84%	92%	91%	93%
Pacific Islander	92%	90%	81%	-
White	90%	96%	93%	97%
Other	0%	100%	-	100%
Unreported	96%	91%	89%	98%
<b>Age Group</b>				
17 and Under	90%	100%	94%	92%
18 to 24	80%	88%	90%	95%
25 to 49	89%	94%	92%	96%
50 and Over	84%	93%	97%	94%
Unreported	100%	88%	-	93%

**Discussion:** The success rate among genders, ethnicities and ages has remained high and is relatively equal throughout the last 3 academic years. The program is dedicated to the success to all equity categories. Although our enrollment has declined due to the reduction in FS 60A students due phasing out and eventual closure of the FS 60A incarcerated Fire fighter training program which was caused by CDCR prison reduction and closure policies. The above table shows that the success rate among all students continuing in our Fire Technology programs is above the rate for Lassen College in general. The goal of the program is to produce highly trained and motivated firefighters for employment to our agency partners.



**Discussion:** The increase in success and retention starting in 2018 is due to the introduction of several new classes that are lab based and dynamic. The new classes were introduced in 2018 which corresponds with the chart. These hands on types of classes are sought after by both agency firefighters and entry-level firefighters and have a high success rate.

In general, the Fire Technology program meets or exceeds the guidelines for retention and has continued to surpass Lassen Community College Retention and Success Rates. For instance, in the 2021-2022 academic year Fire Technology Programs overall retention rate is at 98% in contrast to the Lassen Community College Rate of 89%. Additionally, in that same academic year Fire Technology Student success rate is at 95% in contrast to the General Lassen Community College rate of 78%. It will be our goal to maintain the numbers.

Retention Rate	2018-19	2019-20	2020-21	2021-22
<b>Program-Level</b>				
Fire Technology Overall Retention Rate	89%	97%	95%	98%
Lassen College Retention Rate	88%	91%	88%	89%
<b>Course-Level</b>				
EMT 21	100%	97%	94%	88%
FS 13	33%	100%	92%	100%
FS 14	83%	89%	100%	100%
FS 156	-	-	100%	-
FS 20	-	-	100%	98%
FS 23	-	-	-	100%
FS 26	-	100%	-	-
FS 3	100%	96%	90%	100%
FS 4	0%	100%	100%	81%

FS 49	100%	100%	95%	100%
FS 5	70%	100%	86%	87%
FS 50	-	100%	100%	100%
FS 51	100%	-	100%	100%
FS 57	100%	100%	100%	100%
FS 59	100%	100%	100%	100%
FS 6	27%	-	85%	100%
FS 60	-	-	95%	97%
<b>FS 60A</b>	<b>89%</b>	<b>97%</b>	<b>92%</b>	<b>95%</b>
FS 61	93%	-	100%	97%
FS 64	-	100%	88%	100%
FS 64B	-	-	100%	-
FS 65A	100%	100%	100%	100%
FS 65B	100%	100%	100%	100%
FS 65C	-	100%	-	100%
FS 70	100%	-	-	-
FS 70A	100%	-	-	-
FS 72	100%	100%	100%	100%
FS 72B	-	-	100%	-
FS 73A	-	-	-	100%
FS 74	100%	100%	-	100%
FS 75	100%	-	-	100%
FS 78	-	-	-	100%
FS 8	-	-	75%	100%
FS 80	100%	100%	100%	100%
FS 81	-	100%	100%	100%
FS 85	-	-	100%	100%
FS 89	-	100%	100%	100%
FS 90	-	100%	100%	100%
FS 92A	-	-	100%	100%
FS 92B	-	-	100%	100%
FS 92C	-	-	100%	100%
FS 92D	-	-	-	100%
FS 92E	-	-	-	100%
FS 94	-	-	-	100%
FS 95	-	-	100%	-
FS 96	-	100%	100%	100%
FS 97	-	-	100%	100%
FS 98.21	100%	100%	90%	94%
<b>Modality</b>	-	-	-	-
Correspondence	-	-	-	-
Face-to-Face	89%	97%	95%	98%
Online	-	-	-	-
Hybrid	-	-	-	-



**Discussion:** The program has only offered classes in the face-to-face Modality for the period of this IPR. This chart shows our lower success rates occur mainly in the core classes. This is possibly due to fact that these core classes are longer term than most of our electives and are open to all students who may find that the fire classes are not for them or have adult type problems at home or work and cannot continue with the class. The success and retention rate has increased for last 2 years but still showed lower success rates in our core classes. The above chart also shows and increase in class offerings with high success rates from academic years 20-21 and 21-22. It will be our goal to maintain this success rate through the next IPR. We will be transitioning some of our core classes to Hybrid and online modalities to accommodate our athletes and to attract working firefighters to our degree program.

Retention Rate by Student Demographic	2018-19	2019-20	2020-21	2021-22
<b>Program-Level</b>				
Fire Technology Overall Retention Rate	89%	97%	95%	98%
Lassen College Retention Rate	88%	91%	88%	89%
<b>Gender</b>				
Female	79%	97%	97%	99%
Male	90%	97%	95%	98%
Unreported	50%	100%	100%	100%
<b>Ethnicity-Race-Ancestry</b>				
American Indian or AK Native	90%	100%	96%	100%
Asian	95%	100%	97%	83%
Black or African American	87%	92%	95%	93%
Filipino	87%	93%	100%	100%
Hispanic or Latinx	87%	97%	94%	98%
Pacific Islander	94%	90%	88%	-
White	92%	99%	96%	99%
Other	100%	100%	-	100%
Unreported	100%	96%	89%	100%
<b>Age Group</b>				
17 and Under	100%	100%	98%	95%
18 to 24	83%	94%	97%	98%
25 to 49	92%	98%	95%	98%
50 and Over	93%	98%	97%	100%
Unreported	100%	100%	-	96%

**Discussion:** The retention rate among genders, ethnicities and ages is relatively equal throughout the last 3 academic years. The program is dedicated to the success to all equity categories. The goal of the program is to produce highly trained and motivated firefighters for employment to our agency partners.

Degree and Certificates	2018-19	2019-20	2020-21	2021-22
Fire Technology Degrees Awarded	1	2	8	6
Lassen College Degrees Awarded	310	260	338	236
Fire Technology Certificates Awarded	1		10	8
Lassen College Certificates Awarded	156	128	161	72
Degree or Certificate Program				
AS Fire Technology	1	2	8	6
Cert. of Achievement Fire Technology	1		10	8

**Achievement:**

*Based on your review of the data trends above (e.g., course success, retention, awards) please provide an analysis of achievement gaps and accomplishments in the program.*

**Discussion:** The increase in degrees and certificates over the last 2 years is mainly due to the degree program at the prison Firehouse. There was an uptick in degrees awarded 20/21 due to the end of Covid and there were a few students who returned to finish their degree with the new program director. It is predicted that the Wildland CA will soon have a few recipients due to some students just finishing up their progress over the last 2 semesters.

**Student Learning Outcomes:**

*SLO assessment is important to maintain and improve an effective learning experience for LCC students. Evaluating SLO results regularly is helpful for evaluating student learning and identifying emerging program needs. There is a link between SLO assessment results, SLO improvement plans and review of curriculum and/or budget requests. Regular program assessment will drive program improvement. These records are maintained in the online Data Management and Visualization tool (TABLEAU) and are available for review by faculty at any time through its self-updating, interactive dashboards, and reports. Feedback and narrative from the Share Point tool will be included in the reports.*

*\*By contract, faculty are required to prepare and submit an SLO Assessment Plan for each class within one week of the first-class meeting and implementation of the assessment method as indicated on the SLO Plan for each class. Submission of the (a) results of the assessment methods and (b) steps taken as result of the assessment within five (5) District business days after the last scheduled meeting of the class. Both submissions will be made in accordance with District tracking procedures (i.e., may be paper-based or electronic).*

- *Provide an analysis of findings of the assessments completed and recommendations being made in individual assessments.*
- *Consider the impact or influence of the assessment results at the program level.*
- *Identify and evaluate the Program Student Learning Outcomes including the relationship between course, program and institutional student learning outcomes utilizing information provided by the Office of Institutional Effectiveness.*

**Fire Technology Course SLO Table**

<b>Course Assessed</b>	<b>Recommendations for Improvement</b>
EMT-21 Emergency Medical Responder	Listed in Nursing no Longer in Fire Technology
FS-3 Fund. of Fire Prevention	SLO met from 90 %-100% , no changes in SLO
FS-4 Fire Protection Equipment	SLO met from 90 %-100% , no changes in SLO
FS-5 Fire Orientation and Org.	SLO met from 90 %-100% , no changes in SLO
FS-6 Bldgconstr for Fire Protection	SLO met from 90 %-100% , no changes in SLO
FS-8 Wildland Fire Suppression	SLOs updated to increase measurability
FS-13 Fire Behavior and Combustion	SLO met from 90 %-100% , no changes in SLO
FS-14 Principles Fire Safe/Survival	SLO met from 90 %-100% , no changes in SLO
FS-20 1st Aid/Cpr Pub Emp	SLOs changed from 1 to 3 separate SLOs to increase measurability
FS-23 Firing Operations (S-219)	SLO met from 90 %-100% , no changes in SLO
FS-26 Basic Air Operations (S-270)	SLO met from 90 %-100% , no changes in SLO
FS-49 Fire Science Work Experience	SLO met from 90 %-100% , no changes in SLO
FS-50 Rapid Intervention Crew Oper	SLO met from 90 %-100% , no changes in SLO
FS-51 Intro to Fire Careers	SLO met from 90 %-100% , no changes in SLO
FS-57 Vehicle Extrication	SLOs changed from 1 to 3 separate SLOs to increase measurability
FS-59 Confined Space Awareness	SLOs changed from 3 to 4 separate SLOs and reworded to increase measurability
FS-60 Wildland Firefighter (calfire)	SLO met from 90 %-100% , no changes in SLO
FS-60A Basic Fire Crew Firefighter	SLO met from 90 %-100% , no changes in SLO
FS-60B Fire Crew Firefighter	Change wording in SLO #4 to increase measurability
FS-61 Basic Firefighter (basic 32)	SLO met from 90 %-100% , no changes in SLO
FS-64 Instructor 1	SLO met from 90 %-100% , no changes in SLO
FS-64B Instructor II	SLO met from 90 %-100% , no changes in SLO
FS-65A Driver Operator 1A	SLO met from 90 %-100% , no changes in SLO
FS-65B Driver Operator 1B	SLO met from 90 %-100% , no changes in SLO
FS-65C Wildland Fire Apparatus Oper	SLO met from 90 %-100% , no changes in SLO
FS-70 Heavy Equipment Boss (s-236)	SLOs reworded to increase measurability
FS-70A Single Resource Academy	SLO met from 90 %-100% , no changes in SLO
FS-70B Engine Boss (Single Resource)	SLOs reworded to increase measurability
FS 70C – Single Resource Crew Boss (S-230)	SLOs reworded to increase measurability
FS-72 HazMat First Responder Operational	SLO met from 90 %-100% , no changes in SLO
FS-72A Hazmat First Responder Refresher	SLO met from 90 %-100% , no changes in SLO
FS-72B Hazmat First Responder-Decontamination	SLO met from 90 %-100% , no changes in SLO
FS-73A Incident Bus. Management S-260	SLOs reworded to increase measurability
FS-74 Fire in the Interface (S215)	SLO met from 90 %-100% , no changes in SLO

FS-75 Fire Behavior (S-290)	SLO met from 90 %-100% , no changes in SLO
FS-78 Followership to Leadership	SLO met from 90 %-100% , no changes in SLO
FS-80 Firefighter Survival	SLO met from 90 %-100% , no changes in SLO
FS-81 Wildland Firefighter Safety	SLOs increased from 1 to 2 and reworded to increase measurability
FS-85 Maps/Compass/GPS	SLO met from 90 %-100% , no changes in SLO
FS-89 Fire Chainsaws (s-212)	SLO met from 90 %-100% , no changes in SLO
FS-90 Portable Pumps/Water(s-211)	SLO met from 90 %-100% , no changes in SLO
FS-92A Company Officer 2A: HR Manage	SLO met from 90 %-100% , no changes in SLO
FS-92B Company Officer 2B Gen Admin	SLO met from 90 %-100% , no changes in SLO
FS-92C Company Officer 2C: Fire Insp	SLO met from 90 %-100% , no changes in SLO
FS-92D Company Officer 2D All-Risk	SLO met from 90 %-100% , no changes in SLO
FS-92E Company Officer 2E: Wildland	SLO met from 90 %-100% , no changes in SLO
FS-94 Strike Team/Task Force Leader	SLO met from 90 %-100% , no changes in SLO
FS-95 Initial Attack Incident Comm	SLO met from 90 %-100% , no changes in SLO
FS-96 Low Angle Rope Rescue	SLO met from 90 %-100% , no changes in SLO
FS-97 Fire Control 4	SLO met from 90 %-100% , no changes in SLO
FS 98.18 Annual Fireline Safety Refresher Training (RT-130)	SLOs increased from 1 to 2 to increase measurability
FS-98.20 Incident Safety Hired Vendors	SLO met from 90 %-100% , no changes in SLO
FS-98.21 Volunteer Firefighter Academy	SLO met from 90 %-100% , no changes in SLO
FS-156 Pump Operations	SLO met from 90 %-100% , no changes in SLO

**Fire Technology Program SLO Table**

Program Student Learning Outcomes	Summarize Findings
<b><u>Fire Technology Associate of Science Degree</u></b> PSLO 1: Safely perform basic firefighting skills as part of the Incident Command System in preparation for an entry-level position at most firefighting agencies.	From 2020-2022, this PSLO has been achieved with from 98% to 100% of Fire technology students. No change in PSLO at this time.
<b><u>Fire Technology Certificate of Achievement</u></b> PSLO 1: Safely perform basic firefighting skills as part of the Incident Command System in preparation for an entry-level position at most firefighting agencies.	From 2020-2022, this PSLO has been achieved with from 98% to 100% of Fire technology students. No change in PSLO at this time.

<p><b><u>Basic Wildland Firefighter Certificate of Achievement</u></b></p> <p>PSLO 1: Demonstrate an understanding of Basic Wildland fire terminology, firefighting methods and safe and efficient use of firefighting tools.</p> <p>PSLO 2: Explain, in detail, the organization of fire agencies and how the chain of command is used at incidents and day to day operations.</p> <p>PSLO 3: Apply critical thinking skills to ever changing situations such as crew dynamics, and wildland and all risk fire and rescue incidents</p> <p>PSLO 4: Be academically and physically prepared to obtain an entry-level position in any of the wildland organizations, and be a productive and motivated member of a fire crew.</p>	<p>From 2020-2022, PSLOs 1 thru 4 has been achieved from 100% of Fire technology students in this certificate track. No change in PSLO at this time.</p>
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<p><b><u>Cal Fire Certificate of Accomplishment</u></b></p> <p>PSLO 1: Function effectively, safely, and cooperatively as a member of a wildland fire suppression crew; develop skills in the use of tools for wildland fire suppression and their maintenance.</p>	<p>From 2020-2022, this PSLO has been achieved with 100% of Fire technology students in this certificate of Accomplishment track. No change in PSLO at this time.</p>
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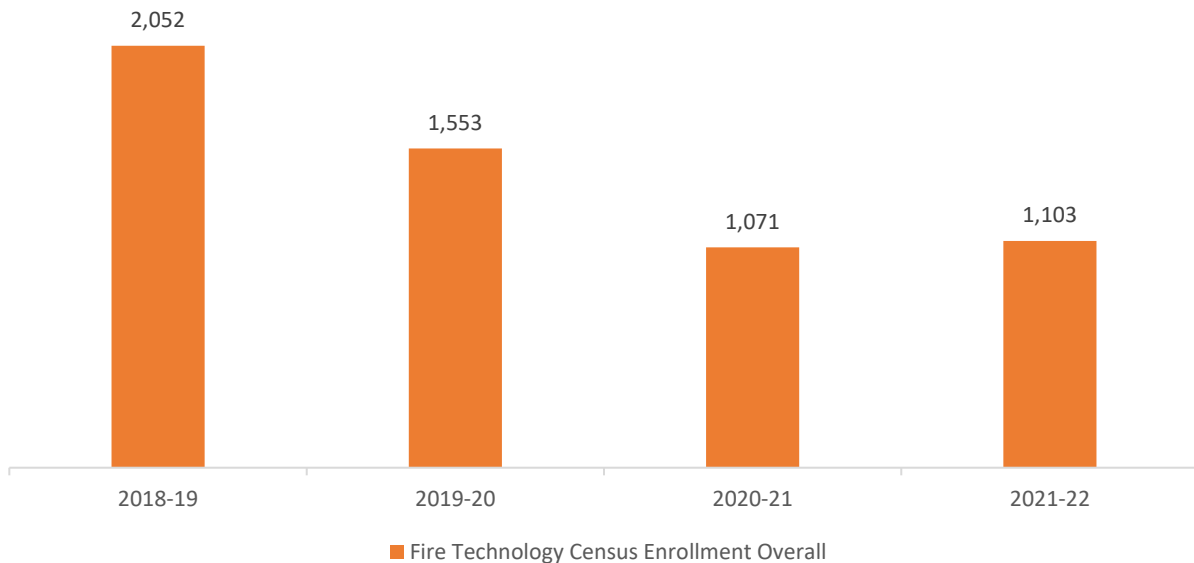
**Recommendations for Improvement**

**Discussion:** A great deal of time has been devoted to reviewing and revising our course outlines and ensuring that the SLO's are relevant to our students learning important objectives to be used in the real world of firefighting. All of our course outlines meet that requirement of our program and meet the goals and objectives of Lassen Community College. The high rate of compliance with our SLO's is indicative that our instructional staff is meeting both the needs of the student the College and the future employers.

## Enrollment Management:

Enrollment Management	2018-19	2019-20	2020-21	2021-22
Fire Technology Census Enrollment Overall	2,052	1,553	1,071	1,103
Lassen College Census Enrollment	15,117	14,320	12,244	11,847
Fire Technology Full-Time Equivalent Students (FTES)	191.7	140.2	85.3	80.1
Lassen College Full-Time Equivalent Students (FTES)	1,648	1,561	1,340	1,269
Fire Technology Number of Sections	79	86	90	109
Lassen College Number of Sections	883	851	758	818
Fire Technology Fill Rate	53%	38%	35%	37%
Lassen College Fill Rate	55%	54%	55%	51%
Fire Technology Full-Time Equivalent Faculty (FTEF)	1.8	2.2	3.2	4.2
Lassen College Full-Time Equivalent Faculty (FTEF)	79.8	77.7	70.6	74.2
Fire Technology FTES/FTEF	108.0	64.8	26.5	19.3
Lassen College FTES/FTEF	20.7	20.1	19	17.1

Enrollment (Seats Filled at Census)



## Discussion

The enrollment management chart indicates some important numbers for our program:

- Fire overall enrollment is down from 19-21 which can be attributed to the reduction and ultimate loss of the FS-60A classes from the Cal Fire Training center at CCC. From the low of 1071 in 20/21 to an increase to 1103 in 21/22 shows the success of our increased programming and indicated by the increase in sections offered from 90 to 109 in 21/22.

- The reduction in FTES in the last few years appears to be related to the reduction of classes for the FS-60A classes offered at the Cal Fire Training Center at CCC. With the FS-60A being gone we will in all likelihood level out at the 80-85 FTE mark for our on campus offerings. We are entertaining ideas of going to online core classes and have changed our core class offerings to mornings to accommodate athletic practice schedules in an attempt to increase interest in our degree program.
- Class fill rate also indicates a downward trend but seems to have leveled off in the last 3 years. The FS-60 A class also has played a vital part in this downtrend. With Covid and the closure of CCC the enrollment has been reduced to 6-8 students per class and the cap was set at 30. The small uptick in the fill rate for 21/22 is an indication of the increased enrollment for on campus classes. Anecdotally, our on campus classes have increased from an observed average of 5-6 to where we now have an average of 10-12 students per class. We have developed feeder programs such as the Cal Fire Academy, SIR fuels crew, the High School pathways program and the Forest Service Instructional contract which should help fill our classes and we should see the benefits of these programs statistically in the next IPR cycle. Improving our marketing campaign through social media and recruiting visits will be goal for the following year.
- **FTEF:** Full-time Equivalent Faculty: The amount of instructional employee time expressed in a proportion to that Faculty (FTEF) required in a full-time teaching position, with 1.0 representing one full-time position. FTE is derived by dividing the amount of time taught in a position by the amount of teaching hours required in a corresponding position.

Using the above as a definition, The FTEF of 4.2 indicates that the Fire Program is operating at a very high level with essentially 8 adjuncts over the past 2 years. With the limited availability of adjuncts we are essentially working or adjunct staff at twice their capacity. This is not a sustainable model and makes the case for hiring 1 additional full-time faculty for the fire program. Although our adjuncts are stepping up and helping with the program in the short term it is important to remember that they all have full time jobs or are retired and we run the very real risk of burning them out. Additionally, in the last 6 months, 2 of our adjuncts have taken promotions or changed jobs and have consequently become less available for instructing. 3 of our adjuncts are retired and are only available for certain short-term classes and our adjunct that has been our main core class instructor may be leaving in the next 2 years. The remaining adjuncts are limited in their scope of expertise and don't necessarily add to the program in the big picture. At some point the time required to teach outweighs the benefit of the extra spending money. With our expanded course offerings having a full-time instructor would be invaluable to maintain our program and help build it in the future. For instance: for professional career advancement we offer 8 classes for the Cal Fire JAC program and for The California Company Officer Certification we offer all 5 of the required classes. All of these classes are offered over 2 semesters and we typically have to hire a professional expert to teach at least 4 of those classes with an adjunct IOR and have adjuncts teach the remainder. If we had a full-time instructor for those classes that would free up adjuncts for most of our short term and specialty classes.

Enrollment	2018-19	2019-20	2020-21	2021-22
<b>Course-Level</b>				
EMT 21	40	33	54	16
FS 13	12	10	24	7
FS 14	18	21	21	6
FS 156	0	0	11	0
FS 20	0	0	16	48
FS 23	0	0	0	16
FS 26	0	13	0	0
FS 3	3	25	10	16
FS 4	6	8	13	26
FS 49	12	26	20	26
FS 5	10	19	14	23
FS 50	0	4	26	36
FS 51	6	0	26	39
FS 57	11	21	17	41
FS 59	18	21	27	44
FS 6	11	0	20	10
FS 60	0	0	19	38
FS 60A	1770	1189	403	199
FS 61	40	0	42	65
FS 64	0	12	17	11
FS 64B	0	0	7	0
FS 65A	10	19	23	30
FS 65B	10	19	11	29
FS 65C	0	15	0	21
FS 70	18	0	0	0
FS 70A	20	0	0	0
FS 72	6	11	33	50
FS 72B	0	0	11	0
FS 73A	0	0	0	6
FS 74	12	13	0	12
FS 75	4	0	0	12
FS 78	0	0	0	12
FS 8	0	0	8	8
FS 80	8	13	22	50
FS 81	0	5	27	38
FS 85	0	0	7	27
FS 89	0	13	20	16
FS 90	0	12	12	12
FS 92A	0	0	8	5
FS 92B	0	0	17	7
FS 92C	0	0	13	8
FS 92D	0	0	0	7
FS 92E	0	0	0	8



FS 94	0	0	0	5
FS 95	0	0	4	0
FS 96	0	22	25	21
FS 97	0	0	12	36
FS 98.21	7	9	31	16
<b>Modality</b>				
Correspondence	0	0	0	0
Face-to-Face	2,052	1,553	1,071	1,103
Online	0	0	0	0
Hybrid	0	0	0	0

Fire Technology Enrollment by Student Demographic	2018-19	2019-20	2020-21	2021-22
<b>Program-Level</b>				
Fire Technology Census Enrollment Overall	2,052	1,553	1,071	1,103
<b>Gender</b>				
Female	33	32	63	69
Male	2,017	1,520	1,006	1,031
Unreported	2	1	2	3
<b>Ethnicity-Race-Ancestry</b>				
American Indian or AK Native	58	49	27	24
Asian	75	55	35	12
Black or African American	358	260	122	82
Filipino	15	29	6	2
Hispanic or Latinx	847	520	262	283
Other	1	3	0	2
Pacific Islander	36	20	16	0
Unreported	26	25	9	41
White	636	592	594	657
<b>Age Group</b>				
17 and Under	10	5	47	86
18 to 24	605	317	245	316
25 to 49	1392	1160	745	639
50 and Over	44	46	34	35
Unreported	1	25	0	27

*Based on your review of the data trends above (e.g., enrollment, FTES, FTES/FTEF, fill rate) please provide an analysis of efficiency gaps and accomplishments.*

**Discussion:** The above charts do exemplify the need to develop recruiting opportunities to include more diversity within our student ranks. We are currently assisting the Susanville Rancheria with their training needs to allow them to start a fuels/Fire crew. Native Americans are an underserved population that could greatly benefit from what the fire program has to offer, and we look forward to cultivating this relationship. The reduction in overall numbers from 20/21 to 21/22 reflect both COVID-19 enrollment and in particular

the phasing out of the FS-60A Cal Fire training program. The FS-60A has been a workhorse for the FTE's and the programs enrollment numbers but unfortunately is being phased out by the closure of the CCC prison. November of 2022 will be the last of the FS-60A classes. This closure will affect our diversity statistics as well as or FTE and enrollment.

**The enrollment chart for each course reveals some interesting statistics as well.**

- The SFT Company Officer classes, FS-92A-92E, saw a decline in enrollment from its initial offerings in 20/21. These classes are offered in the same format across the state and it is difficult to attract students from outside of the area to attend these classes at LCC. In 21/22 the enrollment declined to an average of 7 or 8. The majority of these students were local with only 1 or 2 being from outside the area. After talking with these students, they only took our class because they were on a deadline to complete their certifications. Additionally, these have been taught by contract instructors and are expensive for the college to host. Low enrollment coupled with high expenses is not a long term sustainable model. These classes will be watched in the coming year and evaluated for their efficiency.
- Our entry level classes have been our most successful offerings. With most basic skill classes showing an initial increase in enrollment and holding steady over 2 academic years. This can be attributed to 2 Cal fire Academies per year and starting our partnership with the Susanville Indian Rancheria. The prospect of knowing that the classes will lead directly to employment is very enticing for our students.
- The FS-65A and B Driver Operator Series is identified as an expanding program. This series is required by vehicle code to accommodate the drivers license training and have Chiefs sign off on the FF endorsement for their Firefighters. Cal Fire and other agencies have recently adopted this and it appears that this may be a market to exploit.
- There was an anomaly noted with the enrollment for FS-13 and FS-14. The Chart shows low enrollment for the 21/22 academic year. The enrollment in these classes are set on a fall odd and spring even timeframe so the attached chart did not fully show the enrollment in these courses. The numbers shown are from the CCC Firehouse classes that are offered annually. The table in Appendix E, which extends to 2022-2023, shows the enrollment back at 24 for that year. FS-14 is not offered on campus until 2023 but it is also expected to come up the previous number at that time. Additionally, advising plans for Firehouse and on-campus are listed in Appendix E to be able to view when those fire courses are offered.

**Plans to increase enrollment:**

- Develop and update classes that may be transferable to four-year colleges. Initiate feasibility study into developing late start/short term general education classes. These classes would provide a pathway for degree completion for students who have unique scheduling requirements due to seasonal fire employment.
- Increase advertising and develop a larger social media presence.
- Expand offerings of FS-65A and FS-65B
- Add core class modalities to include online and Hybrid classes(full time Instructor)

## Curriculum

### Degrees and/or Certificates

Degree or Certificate Title	Award Type (AA, AS, AAT, AST, etc.)	Units	Term of Last Revision
Associate in Science Degree in Fire Technology	Associate in Science	60	Fall 2022
Certificate of Achievement in Basic Wildland Firefighter	Certificate of Achievement	17.5	Fall 2022
CAL Fire Academy Certificate of Accomplishment	Certificate of Accomplishment	12.5	Fall 2022
Certificate of Achievement in Fire Technology	Certificate of Achievement	30	Fall 2022

*Provide a narrative of revisions made.*

**Discussion:** No change is recommended to any of our programs as of this review. The CA for Wildland Firefighter should see some students being awarded in 2023. This CA was created and approved in 2021 and we are just now getting students through the program.

### **Courses:**

*Summarize curriculum revisions, new course adoptions, and/or course deletions since the last program review. Describe the program accomplishments and/or changes (e.g., major revisions, additions, etc.). All courses need to be submitted to the Curriculum Committee for revision at least once every five years.*

*Whether changes to a course outline are necessary or not, a Revision to Existing Course Form for each course must be completed and submitted to the Curriculum/Academic Standards Committee for action. If all the courses in the certificate or degree are reviewed at one time, a single Program revision form can be used. If there are changes made to a course, the changes must be noted on the revision form. When reviewing a single course and changes are necessary, indicate the revisions on the form. Where no changes are necessary, simply indicate on the Revision Form that “the course has been reviewed as part of the program review and no changes are necessary.” All program certificates, degrees, PSLO maps, and SLO maps are also required to be reviewed and updated if necessary. PSLO maps require a program revision form and course SLO maps require a course revision form. If all maps are reviewed at the same time, a single program revision form can be used. Advising plans also need to be reviewed and updated. A program revision form is used to review and update the advising plan if necessary. Revision forms will be retained in the Instructional Office with the Curriculum agenda packets.*

*Following the Curriculum/Academic Standards Committee action on all submitted Revision to Existing Course Forms, a summary Instructional Program Curriculum Review Form will be completed by the Curriculum/Academic Standards Subcommittee Chair and given to the program faculty for inclusion in the program review.*

*The signed Instructional Program Curriculum Review Form is to be included with your*

completed program review documents for all certificates and degrees.

Signed Instructional Program Curriculum Review Form is in Appendix C.

Course	Last Offered	Term of Last Revision
EMT-21 Emergency Medical Responder	Fall 2021	*EMT now under Nursing dept.
FS-13 Fire Behavior and Combustion	Fall 2022	Fall 2022
FS-14 Principles Fire Safe/Survival	Spring 2022	Fall 2022
FS-20 1st Aid/Cpr Pub Emp	Fall 2022	Fall 2022
FS-23 Firing Operations (S-219)	Spring 2022	Fall 2022
FS-26 Basic Air Operations (S-270)	Spring 2020	Fall 2022
FS-3 Fund. of Fire Prevention	Spring 2022	Fall 2022
FS-4 Fire Protection Equipment	Summer 2022	Fall 2022
FS-49 Fire Science Work Experience	Fall 2022	Fall 2022
FS-5 Fire Orientation and Org.	Fall 2022	Fall 2022
FS-50 Rapid Intervention Crew Oper	Spring 2022	Fall 2022
FS-51 Intro to Fire Careers	Spring 2022	Fall 2022
FS-57 Vehicle Extrication	Fall 2022	Fall 2022
FS-59 Confined Space Awareness	Fall 2022	Fall 2022
FS-6 Bldgconstr for Fire Protection	Summer 2022	Fall 2022
FS-60 Wildland Firefighter (calfire)	Fall 2022	Fall 2022
FS-60A Basic Fire Crew Firefighter	Fall 2022	Fall 2022
FS-60B Fire Crew Firefighter	NEW	Fall 2022
FS-61 Basic Firefighter (basic 32)	Fall 2022	Fall 2022
FS-64 Instructor 1	Fall 2022	Fall 2022
FS-64B Instructor II	Spring 2021	Fall 2022
FS-65A Driver Operator 1A	Spring 2022	Fall 2022
FS-65B Driver Operator 1B	Fall 2022	Fall 2022
FS-65C Wildland Fire Apparatus Oper	Summer 2021	Fall 2022
FS-70 Heavy Equipment Boss (s-236)	Spring 2019	Fall 2022
FS-70A Single Resource Academy	Spring 2019	Fall 2022
FS-72A HazMat First Responder Awareness	NEW	Fall 2022
FS-72 Hazmat First Responder Operati	Fall 2022	Fall 2022
FS-72B Hazmat First Responder- Decont	Summer 2022	Fall 2022
FS-73A Incident Bus. Management S-260	Spring 2022	Fall 2022
FS-74 Fire in the Interface (S215)	Summer 2022	Fall 2022
FS-75 Intermediate Wildland Behavior (S-290)	Spring 2022	Fall 2022

FS-78 Followership to Leadership	Spring 2022	Fall 2022
FS-8 Wildland Fire Suppression	Spring 2022	Fall 2022
FS-80 Firefighter Survival	Fall 2022	Fall 2022
FS-81 Wildland Firefighter Safety	Fall 2022	Fall 2022
FS-85 Maps/Compass/GPS	Spring 2022	Fall 2022
FS-89 Fire Chainsaws (s-212)	Spring 2022	Fall 2022
FS-90 Portable Pumps/Water(s-211)	Spring 2022	Fall 2022
FS-92A Company Officer 2A: HR Manage	Spring 2022	Fall 2022
FS-92B Company Officer 2B Gen Admin	Spring 2022	Fall 2022
FS-92C Company Officer 2C: Fire Insp	Spring 2022	Fall 2022
FS-92D Company Officer 2D All-Risk	Fall 2021	Fall 2022
FS-92E Company Officer 2E: Wildland	Fall 2021	Fall 2022
FS-94 Strike Team/Task Force Leader	Spring 2022	Fall 2022
FS-95 Initial Attack Incident Comm (S-200)	Spring 2021	Fall 2022
FS-96 Low Angle Rope Rescue	Summer 2022	Fall 2022
FS-96A Rope Rescue Awareness/Operations	NEW	Fall 2022
FS-97 Fire Control 4	Spring 2022	Fall 2022
FS-98.18 Annual Equipment Training	Spring 2016	Fall 2022
FS-98.20 Incident Safety Hired Vendors	Spring 2022	Fall 2022
FS-98.21 Volunteer Firefighter Academy	Spring 2022	Fall 2022
FS-156 Pump Operations	Spring 2021	Fall 2022

Provide a narrative of revisions made.

**Discussion:** the majority of our course revisions were completed for the previous IPR. Any revisions that have been approved in fall 2022 were minor adjustments to SLO's and making minor adjustments to match requirements for State Fire Training or National Wildfire Coordinating Group (NWCG) classes that the majority of our classes follow.

- In 2021 We identified some classes that had not been offered for some time and did not meet our programming needs. Those classes were discontinued

#### Articulation/Integration of Curriculum

- *Attach a tabular comparison of Lassen Community College courses articulating with UC and CSU, indicating courses with approved C-ID designations as applicable (Obtain copies of Articulation Agreements from the Transfer Center / Articulation Officer)*
- *Provide a narrative reviewing the Lassen Community College courses and courses at four-year institutions for course alignment. (e.g., two courses at Lassen needed to articulate with one course at UC) and the unit requirements for Lassen Community College courses as compared to four-year institutions.*

2022-2023 Fire Technology Program Articulation 11-21-2022							
LCC Fire course #	FS 3	FS 4	FS 5	FS 6	FS 13	FS 14	FS 49
FS Course Title	Fundamentals of Fire Prevention	Fire Protection Equipment and Systems	Fire Orientation and Organization	Building Construction for Fire Protection	Fire Behavior and Combustion	Principles of Fire Safety and Survival	Fire Science Work Experience
CSU GE							AREA E1
*Potential CCC-CID Descriptor	FIRE 110 X	FIRE 120 X	FIRE 100 X	FIRE 130X	FIRE 140X	FIRE 150X	
California State University, Los Angeles (2022-2023 Agreement)	FPAT 2901 Fire Prevention (3.00)	FPAT 2902 Fire Protection Systems (3.00)	FPAT 2900-Principles of Emergency Services	FPAT 2903-Building Construction for Fire Protection (3.00)	FPAT 2904-Fire Behavior and Combustion (3.00)	FPAT 2905-Principles of Fire and Emergency Services Safety and Survival (3.00)	

\*NOTE: LCC Fire classes do not currently have CI-D numbers, based on FESHE curriculum and other CC's, our course align with the CI-D numbers listed above.

**Discussion:** Our Fire Technology core classes follow the Fire and Emergency Services Higher Education (FESHE) curriculum which is followed by most college fire programs. Although Lassen Collee Fire Technology does not have Ci-D number for classes, based on a review of other colleges Following FESHE curriculum we have listed classes that would be eligible for a CI-D Number. Because the emphasis of the Fire Technology Program has been employment, we do not have many articulation agreements. Our newest agreement is with the CSU, Los Angeles and is attached in the Appendices. In the future we are also hoping to establish an agreement with Idaho State University and other schools that are developing 4 yr programs.

**External Compliance:**

*Provide a summary of any compliance regulations (e.g., accreditation, accessibility), actions taken, and gaps identified.*

In order to issue industry-based certifications, Fire Technology faculty must meet National Wildfire Coordinating Group (NWCG) standards for wildland- based certificate courses and Office of state Fire Marshal- State Fire Training (SFT) standards for structure based certificate courses.

The NWCG standards for course Deliver, PMS 901-1 states:

“Non-member agencies or entities (e.g., educational institutions, contractor associations) may deliver NWCG training courses when the standards established in this publication are met. Non-member agencies or entities are encouraged to establish formal agreements with local or

geographic area member agencies when delivering NWCG training. Such cooperative efforts are beneficial to the cooperators and to all students. For course completion certification, see Issuing the NWCG Training Course Completion Certificate.”

<https://www.nwcg.gov/publications/pms901-1> accessed on 11-14-2022.

In the "Issuing the NWCG Training Course Completion Certificate" section it states:

..." Educational institutions, contractor associations, and non-member agencies may issue successful students the NWCG Training Course Completion Certificate, PMS 921-1 for NWCG courses if one of the following conditions is met:

- The Lead Instructor is an authorized representative of an NWCG member agency
- The entity sponsoring the NWCG course has a formal agreement established with an NWCG member agency." ... <https://www.nwcg.gov/publications/pms901-1#ICCC> accessed on 11-14-2022.

To this end, LCC Fire Technology Program established a Memorandum of Understanding (MOU) with NWCG member agency, United States Department of Interior (USDI), Bureau of Land Management, Northern California District (BLM). Which runs from February 3, 2022 and it effective until one or both parties elect to terminate.

Currently, the LCC Fire Technology Program also has a contract with member agency United States Department of Agriculture (USDA), United States Forest Service (USFS) under agreement #21-CO-11050600-002 to allow for issuing of recognized NWCG certificates from January 1, 2021 thru December 31, 2027.

State fire Training Courses are categorized into the California Fire Services Training and Education System (CFSTES) with training course that lead to job function certification and the fire service Training and Education Program (FSTEP) courses, which include continuing education and topic-specific courses. All LCC Fire technology faculty who teach these courses met these standards or we contact with professional experts so we can provide State Fire Training (SFT) courses within our local fire community. This is a costly practice as we often have an instructor of record who meets district requirement and additional professional experts who meet ST requirement for SFT courses. This would be aided by the hire of a full-time fire technology faculty member who would be able to meet both of these standards to provided the needed fire courses.

#### **External Analysis: Job Market Assessment**

*Provide a summary of Industry Advisory Board suggestions and market data. The market data will be populated for Career Technical Education programs only.*

Fire Technology Program Advisory board members (Attachment G) have shared that there is a great need in our local area for both firefighters who work in fire suppression and Forestry technicians who work in the areas of ecosystem health including fire prevention and restoration of ecosystems following fire. in the areas of both Federal and state level governmental jobs such as USFS, BLM, SIR and Cal Fire, as well as a need for firefighter who are volunteers within local agencies such as local fire departments. The Program

Endorsement Brief from the Centers of Excellence for Labor market research from November 2020 found the following:

The Far North region held 1,891 jobs for fire prevention workers in 2019. Jobs for fire prevention workers are projected to increase by nearly 4% over the next five years. Jobs for forest and conservation technicians are projected to increase by nearly 1% over the next five years.

- Over the next five years, fire prevention workers are projected to have 164 annual openings in the Far North region. There are 153 projected openings for forest and conservation technicians over the next five years.
- Wage data shows that fire prevention workers and forest and conservation technicians tend to earn more than the subregion's living wage. Reported earnings for fire prevention workers range from a low of \$15 per hour for entry-level work to a high of \$48 per hour for experienced workers.
- Fifty-nine percent of existing fire prevention workers and 38% of existing forest and conservation technicians have education consistent with community college offerings (some college or associate degrees).

### **Program Planning and Communication Strategies**

*Describe the communication methods and interaction strategies used by your program faculty and administrators to discuss program-level planning, curriculum, SLOs, PSLOs, equity, student achievement, and institutional performance data.*

**Discussion:** The program has regularly scheduled advisory committee meetings. This is usually where our programming strategy starts as most of our committee members are currently employed in the industry. Additionally, the Director holds a Fire Faculty meeting each year and discusses the needs of the program and makes sure all faculty understands how the faculty's administrative duties are accomplished.

### **Academic Planning Analysis Summary**

*Summarize the key findings from the program analysis and outline opportunities for change.*

- The Fire Technology Program has consistently maintained agreements and contract needed to meet industry federal and state fire training standards
- Despite the variety and diversity of program pathways, retention and student success remains high and consistently above the Lassen Community College rates.
- In the 2019-2020 year, despite not having neither a director nor full-time faculty, the Fire technology Program still had an increase in FETF from the previous year illustrating the dedication of fire staff and adjunct faculty. These number have gone up showing the need for full-time fire faculty to continue to meet the needs of our local fire communities.
- Although enrollment for FS 60A's will reduce Fire Technology overall enrollment, Fire technology Director, Faculty and staff continue to pursue innovative programming to enhance enrollment.
- Remaining HDSP Firehouse program continues to show success through increase in



degree completion. We do not yet know the full extent to which the prison closure may effect this program.

- Need for a Forestry program is supported by Fire Technology Advisory Committee and North Far North center of excellence data. The Forestry program is currently going through our approval process.
- Cal Fire and Susanville Indian Rancheria are areas that have increased on-campus enrollment.
- If a fulltime instructor can be hired the program will pursue online and hybrid classes in an effort to gain more enrollment
- The Driver Operator series FS-65A and FS-65B may be an opportunity for expansion and may be a niche market that will make LCC Fire Technology competitive.

**Section 2: Human Resource Planning  
Workload and Staffing Assessment**

Year	F/T Faculty	P/T Faculty
Previous Year 2021-2022	1 (60/40 contract as Director)	12
Current Year 2022-2023	1 (60/40 contract as Director)	12
Next 2 Years 2023-2024, 2024-2025	2 (1 additional needed)	5

*Provide a narrative that describes the program’s faculty staffing trends and develop a projection for the two years. Discuss the extent to which your current faculty staffing structure meets or does not meet your program’s needs and/or initiatives. Please describe what strategies will be used to diversify your staffing (e.g., education, expertise/skillsets, areas of interest, demographics).*

**Discussion:**

The Fire Technology program has greatly expanded our course offerings over the last 2 years. This expansion has been due to our adjunct instructors stepping up and providing instruction for classes within their specialties. Most of our adjuncts are employed full time in the fire service and are only available at specific times and are not willing to give up more time to teach for our program. Because Fire Technology serves a number of populations, some faculty only have availability to teach for certain classes. For Instance some faculty only teach for the Cal fire academy and are not available to teach other fire classes in our schedule due to employment responsibilities within their agency. This is also true for faculty teaching Wildland classes through our contract with the USFS. Additionally, the key adjunct instructors that we started with 2 years ago have been promoted or taken jobs out of the area or retiring and are no longer available or are limited in their time available for instructing at the college. The pool of qualified local instructors is very limited and the program has tried recruiting locally for qualified instructors but have yet to get anyone on board. We have attempted to “grow” local instructors by offering fire instructor classes for the last 2 years but that has not been fruitful.

Other classes that require special certification such as State Fire Training (SFT) classes the program has to reach out to hire contract instructors because we are not able to provide adjunct instructors with the proper certification. This scenario proves to be very expensive for the college as we must pay for an instructor of record as well as the contract instructor. Some of the SFT classes also require a specific student/Instructor ratio for safety purposes. In order to meet the requirements, we either have to limit our enrollment or hire additional qualified instructors to maintain the safety ratio.

The program currently has one full time instructor/Director to make up for any short falls but have found that this is not a sustainable model due to time constraints. This instructor's time is also split as the program's Director so this position is only 60% of a full time position.

In order to grow our fire program and enrollment and become more efficient, It is warranted to hire an additional full-time instructor who is or can be qualified to teach SFT classes such as the SFT Company officer series and SFT instructor series, degree core classes on campus and at the High Desert Prison Firehouse, as well as NWCG wildland classes and act as Instructor of record as needed. The cost to the college would be approximately \$120,000 which includes benefits. This would greatly relieve the time demands on our adjunct faculty and eliminate the extra cost of contract instructors.

### **Professional Development**

*Provide a description and associated outcomes related to the program's target professional development participation over since the last program review. Discuss the current professional development/training need(s) of your program, and why this need(s) exists. If you have specific trainings you want to request, please include those details.*

### **Discussion:**

Professional development is central to our efforts to create qualified instructors for the fire program. State Fire Training classes are the most problematic for instructors to certify. SFT policy and procedures state that an instructor must take the class to teach the class. In order to groom internal instructors to be qualified for SFT classes we must send our instructors to SFT classes and start task books. We currently have 2 adjunct instructors the have expressed interest in this process that we will pursue in the next few years.

One adjunct instructor is from out of state and is currently working on California equivalencies to teach SFT classes. Our goal for this instructor is to get him qualified for the SFT Company officer and instructor classes that account for 9 of our classes but require special certification to teach.

Another Adjunct is interested in teaching SFT skill based classes such as Auto extrication and the driver operator series. We are currently in the process of determining his needs for qualifying as an SFT instructor.

The Program Director and the Program Coordinator also attend state and local conferences annually which are invaluable for information exchange and developing partnerships with other fire program directors.

Estimated total costs for professional development would be approximately \$5000 annually.

### Section 3: Infrastructure Planning

#### Facilities

- *Describe and evaluate the Lassen Community College facilities available to the program.*
- *Describe and evaluate additional facilities utilized off-campus by the program*
- *Describe any facilities needs identified internal or external analysis*
- *Justify any proposed modifications or additions to existing facilities that would better serve the program planned for the program review cycle.*

**Discussion:** Our new office and classroom facility located the N building are adequate for our present condition.

- The classroom is cooled by 1 single wall mounted air conditioner that is sized inadequately for the large classroom and is too loud to run during class time. Consequently, the AC must be shut off during class time and is too small to do any good during breaks. Having an outside unit similar to what is installed in the M building(AJ) would be beneficial to student comfort and learning.
- There are times when either AJ or The Fire program has 2 simultaneous classes occurring and we are able to utilize classroom space from each others buildings. Expansion of either program may jeopardize this.
- Some of our core classes are taught in VT101 which will no longer be available for classes. Those classes will have to be scheduled into N3. This should not be a problem but we will evaluate as problems arise.
- Water supply for on campus engine operations If flowing large amounts of water, has been a problem due to the fragility of the campus water system. 2 hydrants could be identified by the fire program director and those hydrants could have pressure relief valves installed. The program would then only use the protected hydrants for any on campus engine operations. More work need to be done on making this work.
- The Lassen County Training Center Located by the Susanville Airport is used by the college for its Cal Fire Academy, Firefighter Survival, Ric Operations and the Volunteer Fire Academy. We have found this facility to be lacking in several ways including on sight bathroom facilities and some training props. The program is affiliated with the Lassen County Fire Officers with which we share a common Goal of improving the training grounds. To this end we are assisting with developing props and improvements on the facility through cost sharing and labor. Last year LCC welding was instrumental in providing labor for fabricating window for 2 props made out of shipping containers. The Material for these windows were purchased with LCC grant money. Projects to help with the training center improvements will be ongoing using this same model and in partnership with the Fire Officers Assoc. Cost is variable depending on project.

- Our Fire engines are being stored outside and weather is slowly destroying them. We make every effort to protect them from the elements invariable multiple problem arise when we activate the engines for classes. The program will be seeking some way to find indoor storage for our valuable assets. Possibly hanger space at the Susanville Airport or making space at the Cogen plant if the roll up doors can be repaired. Unknown cost
- The Cogen plant has long been looked at for its many opportunities as a fire training site. The program would like to explore those possibilities for planning purposes.

## Equipment

*Describe and evaluate equipment and equipment support provided for instruction and instructional support.*

**Discussion:** The Fire program does have some needs for additional equipment to support our classes;

- Our red fire engine is suffering from years of neglect and deferred maintenance. Currently we have spent approximately \$5000 dollars on repairs and still have not fixed all of the problems. As the elements take its toll it seems that one item gets fixed other problems appear. The usefulness of this engine to our program may be coming to an end as it may be too costly to keep repairing. This is currently being evaluated by the director. The Director is also currently seeking avenues to obtain 2 additional engines that are newer and simpler to maintain. These engines would come fully operational and give us a good baseline for maintenance instead of trying to catch up to years of neglect on our current engines. Finding indoor space would be very beneficial to preserving these engines for years of service to the college.
- **Having well maintained fire engines is imperative for the fire program. The Repair costs of our fire fleet currently come out of our supply budget of \$8000. Some large repairs have been grant funded in the past but this is not how we should be spending our grant money. If the program is to be expected to maintain our fleet, a budget line item should be developed and funded for at least \$10000 or increase the supply budget line to \$20,000. An alternative to this would be to absorb the fire fleet into the LCC fleet for funding of repairs and maintenance.**
- There are numerous classes that rely on our well maintained apparatus: FS-72A& B, FS-61 Basic 32, FS-8 FF skills, FS-60 Cal fire academy and FS-8.21 volunteer academy, our engines also support FS-80 firefighter survival and FS-50 RIC Ops.
- The program is also working on acquiring a full set of hydraulic vehicle extrication equipment donated from the CCC firehouse.
- Maintenance of all of our equipment is at the forefront of our priorities. In order to insure the safety of our students the following are mandated: Annual ladder testing: \$1000, SCBA and mask annual testing: \$1500
- Our wild land tools are outdated and slowly being placed out of service due to broken handles and worn down by too many sharpening sessions over the last 15 years. The program will need to update our wildland tools at the cost of approximately \$2000 which will get us about 20 new tools.
- Last year the program acquired an adjustable pitch roof ventilation prop. This is the first

section of a modular fire training prop. The program would like to purchase an additional ceiling prop to attach to the existing prop. Currently this would cost us approx. \$5000

- Forcible entry is a skill that must be acquired by any firefighter and Lassen College is lacking on training aids to teach that skill. An additional training prop for forcible entry simulating locks and commercial door breaching should be purchased for approx. \$5000
- During the course of the academic year the program uses consumables such as lumber, plywood for Academy classes and propane for Fire control 4 classes. The cost of these consumables is born by the program and can reach up to \$2000 per semester. This normally comes out of supply budget line but rapidly depletes the budget. This depletion then limits the ability to buy parts and additional supplies to support the program in other ways and consequently maintenance is deferred. The supply budget should be increased to \$10000 to compensate for the purchase of these consumables. If vehicle maintenance is added to this budget line then it should be increased to 20000.

### **Technology**

- *Describe and evaluate technology and technology support provided for instruction and instructional support.*
- *Justify any proposed modifications or additions to existing technology that would better serve the program planned for the next four years.*

### **Discussion:**

- The program has over a million dollars in fire equipment located in the equipment cache. Tracking and inventory control is currently done with basic forms. The program would like to research and purchase an inventory control program to keep track of our equipment. It is the Directors understanding that there is possibly an inventory program that was being implemented campus wide so we may be able to tie into that system.
- Hazardous materials classes are increasingly becoming part of our programming. To support Haz Mat classes and confined space classes we will need 2, 4 gas air monitors with supporting calibration equipment it is estimated to cost approximately \$4000.
- Maintain and support a CTE website and increase social media presence to recruit more students to fill classes

## Section Four: Program Planning

*Progress update on previous action plans*

Action Plan	Progress Detail	Outcomes
Offer classes for students to complete The SFT Company Officer Classe within 2 semesters	Scheduled and hosted classes for last 2 years	Initially very successful but enrollment has declined once local need has been met
Offer classes that meet Cal Fire JAC class needs	All cal fire JAC classes are offered on campus for last 2 years	Enrollment has grown and remains steady
Offer Driver Operator classes	Driver Operator 1A and 1B Offered last 2 years(FS-65A and B)	Enrollment has grown and remains in upward trajectory. With more oppotunities being explored
Develop Cal Fire Academy(FS- 60) to meet needs of Cal Fire crews	Offered 3 on campus fall academies and 1 Academies at Alturas completed	Over 60 students employed with Cal Fire. Enrollment in all classes remain steady
Renew relationship with USFS and renew instructional contract	Signed contract in fall of 2021 and assisted with classes in spring 2022	5 classes hosted off of instructional contract
Obtain agreement with a NWCG member agency to enable LCC to sign NWCG certifications following qualifying classes taught at LCC	Signed agreement with local BLM district in Spring 2022	LCC NWCG certificates are recognized for legitimacy and students are able to be employed in federal agencies
inquire with Susanville Indian Rancheria for the possibility of starting a fire crew and have LCC provide the training	After a couple of years of inquiring an SIR fuels crew was started and provides employment for Native American youth.	Still on ground floor but LCC provided training to 12 members of the fuels crew in Summer of 2022. Development in progress
Hire an ISS to maintain fire equipment	Fall 2022 hired an ISS and shared position with AJ	Completed in Fall of 2022

## Strengths, Weaknesses, Opportunities, Threats (SWOT) Analysis

### Complete SWOT analysis

<b>Strengths</b>	<ul style="list-style-type: none"> <li>- Programming and logistics in place to grow program</li> <li>- high rate of entry level student employment from program</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>-Adjunct Instructor recruitment,</li> <li>- housing for out of area students,</li> <li>- High maintenance cost for College Fire apparatus</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>- Additional FS-65A classes to support Cal Fire and other agencies</li> <li>- modernize equipment to increase relevancy to industry</li> <li>- strengthen partnership with SIR fuels crew ,</li> <li>- complete Forestry degree and offer classes by 2024,</li> <li>- Develop good neighbor policy to reduce tuition for out of state students</li> <li>- Develop online and hybrid modalities to attract students from outside the area.</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>- Competing with much larger programs statewide for the same students</li> </ul>

### Program Plan

*Develop a program action plan based on the findings of the SWOT Analysis. The plan should specify should aligns with one or more College Goals. SLO maps may be utilized to help show the connection.*

- *How do the action plans align with the mission of the college?*
- *What strategic goals do the action plans support?*
- *What ISLOs do the action plans support?*
- *What specific evidence (e.g., SLOs, data) support the action plans?*
- *Based on the action plans what resources are needed?*
- *What are the expected outcomes of the action plans?*
- *What is the total cost of bringing the action plan to life?*

**SWOT Analysis:** The program has developed programming to provide training to meet the needs of a number of different agencies and firefighters. Entry level, Continuing education, career development are the 3 categories we have concentrated on. We have purchased and maintained our equipment to provide safe and up to date equipment for our students to train on. We have accomplished this with a full staff of dedicated adjunct instructors. These adjunct instructors are employed elsewhere and it is only through their dedication that we are able to provide the program we have. There are a number of adjuncts that have taken employment out of the area or have accepted promotions which makes them limited on availability to the program as instructors. Additionally, it is increasingly becoming more difficult to recruit local adjuncts as there are very few qualified instructors in the area. To maintain our course offerings and to provide instruction for any planned expansion, a full time instructor is needed for the program.

The Director has fielded many inquiries from students that are from out of state. Housing is always a big problem as well as the out of state tuition. It would be beneficial for the program to have the good neighbor policy revisited to lower cost for out of state students from the Reno/Tahoe Area

The Driver Operator series FS-65A and B are highly sought after by agencies statewide. These classes are in our career development category and are required by most agencies for FFs to be promoted to Apparatus Operators. These classes are not readily available and are expensive once they are found. LCC is in a unique position to offer these classes due to our on campus fire engine fleet. If we did not have these apparatus students would have to bring their own agency apparatus which would not be feasible for out of area students. It is imperative for the continuation of the success of these classes that we maintain an operational fleet of engines. LCC has developed an operational partnership with the Susanville Indian Rancheria to provide training to their new Fuels crew. This is developing as a great opportunity for the program. The director is developing a forestry degree to meet the employment demands of fuels crews for USFS and Cal Fire.

It is important to recognize that the program is competing with similar fire programs across the state of California. As of now It is not feasible for LCC Fire Technology to provide the same elements of those larger programs, instead, we are looking for opportunities to meet the needs of our community and Local agencies mainly through offering direct employment of our students after training here at LCC. Niche markets do exist for us and we will need to identify those opportunities and explore them further.



Action Plan	Supporting Evidence	Expected Outcome	Resource(s) to Achieve the Action Plan	Resource Category	Estimated Cost	Expense Type	Priority Ranking
<b>Obtain 2 additional fire apparatus</b>	Our present fleet is costing more than they are worth with maintenance Supports growing enrollment of FS-65A and B And used in Cal Fire Academy and Volunteer academy	Reduced maintenance cost, updated equipment for training and increased enrollment	2 pumping fire Apparatus supports 2 classes and multiple sections of each	equipment	Possible donations \$10000 or \$5000/engine <b>Increase maint. Budget to \$20000 for repairs</b>	One time	2
<b>Add ceiling module to existing roof ventilation Training prop</b>	Supports need of Cal fire Module 1A for structure fire training	Provides training to meet Cal Fire module 1A	Purchase ceiling module to existing roof prop	equipment	\$5000	One time	3
<b>Purchase 4 gas air monitoring with supporting calibration equipment</b>	Haz Mat classes and confined space class have air monitoring modules that we are not able to support	Increased student satisfaction and skill development	2 4 gas air monitors with calibration equipment	equipment	\$5000	One time	6
<b>Purchase forcible entry training props for Cal fire Academy and Volunteer academy</b>	Supports requirements for Cal Fire Module 1A LCC has no forcible entry training props	Provides training that allows for the required skill in Cal fire module 1A	Purchase 1 commercial door prop with locks and supporting equipment	equipment	\$3000	One time	4
<b>Full time Instructor</b>	Decrease workload on ever shrinking adjunct instructor cadre Provide for consistent programming and scheduling	Increase class scheduling and student success	Hire full time fire instructor	Personnel	\$150000 includes benefits	One time	1
<b>Clean Space in the Cogen plant for engine storage and training opportunities</b>	Allow for indoor parking of the college engines to minimize exposure to the elements	Reduced maintenance cost for engines	Coordinate with maintenance to repair roll up doors	maintenance	\$5000 estimated for roll up door repair	Possibly on going cost when assessed for training	5

**Appendix A:  
CSU, Los Angeles Articulation Agreement**

## Articulation Agreement by Major

*Effective during the 2022-2023 Academic Year*

To: California State University, Los Angeles  
2022-2023 General Catalog, Semester

From: Lassen Community College  
2022-2023 General Catalog, Semester

### Fire Protection Administration and Technology - B.S.

#### ADMISSIONS CRITERIA FOR MAJOR

[Major Specific Criteria for Transfer Admission](#)

#### GENERAL INFORMATION FOR ALL TRANSFER STUDENTS

[Cal State LA](#)

[General Education Lower Division Courses](#)

[Cal State Apply](#)

[Department of Technology](#)

[Degree with a Guarantee](#)

[ECST Academic Advising](#)

[Technology](#)

[University Catalog](#)

[College of Engineering, Computer Science, and](#)

### FIRE PROTECTION ADMINISTRATION AND TECHNOLOGY - B.S.

#### Overview

The Bachelor of Science degree in Fire Protection Administration and Technology was designed to meet the needs of various fire services for educational experiences that provide both technical and administrative skills. The curriculum was developed through close consultation with representatives of all levels of the fire services from local groups to State and National committees and boards.

#### Requirement for the Degree

Required for the degree are 120 semester units, including applicable lower division preparation at a community college.

A total of 24 semester units of community college courses may be included in the major program. The remainder of the major is primarily upper-division work. A maximum of 12 units may be taken in lower-division courses.

#### Required Community College Preparation for Transfer

1. A minimum of 18 semester units of community college courses is required, as follows (semester units shown):

- Building Construction for Fire Protection (3)
- Introduction to Fire Protection (3)
- Fire Combustion and Behavior (3)
- Fire Equipment and Systems (3)
- Fundamentals of Fire Prevention (3)
- Occupational Safety (3)

2. A maximum of 9 semester units of community college coursework may be used as lower division electives. Select from the following (semester units shown):

- Fire Apparatus and Equipment (3)
- Fire Hydraulics (3)
- Fire Investigation I (3)
- Fire Company Officer (3)
- Structural Firefighting (3)
- Hazardous Materials I and II (3 each)
- Related Codes and Ordinances (3)
- Emergency Medical Technical I (3)
- Wildland Fire Control (3)

#### DIVERSITY REQUIREMENT FOR CAL STATE LA GRADUATION

The articulation information in [Assist.org](#) not only shows a link to the admission requirements (aka our [Major Specific Criteria](#) webpage) but also Cal State LA graduation requirements that may be completed at the lower-division level, prior to transferring to the University. The diversity requirement is a **graduation requirement**, not an admission requirement. The diversity requirement may be completed prior to, or after, transferring to the University.

the Cal State LA degree, students will be required to complete **two courses (six units)** certified as diversity courses, at least one focusing on issues of race and ethnicity and their intersectionality with other social categories that structure inequality in society. These courses can be completed either at the lower division or upper-division level from among courses satisfying GE requirements.

Please see the **Requirement Information** sections below for the lower-division courses that will meet the Diversity and Race & Ethnicity Requirements.

### LOWER DIVISION REQUIRED COURSES

<b>FPAT 2900</b> - Principles of Emergency Services (3.00)	←	<b>FS 5</b> - Fire Orientation and Management (3.00)
<b>FPAT 2901</b> - Fire Prevention (3.00)	←	<b>FS 3</b> - Fundamentals of Fire Prevention (3.00)
<b>FPAT 2902</b> - Fire Protection Systems (3.00)	←	<b>FS 4</b> - Fundamental of Fire Prevention Equipment (3.00)
<b>FPAT 2903</b> - Building Construction for Fire Protection (3.00)	←	<b>FS 6</b> - Building Construction for Fire Protection (3.00)
<b>FPAT 2904</b> - Fire Behavior and Combustion (3.00)	←	<b>FS 13</b> - Fire Behavior and Combustion (3.00)
<b>FPAT 2905</b> - Principles of Emergency Services Safety and Survival (3.00)	←	<b>FS 14</b> - Principles of Fire Safety and Survival (3.00)

### LOWER DIVISION ELECTIVES - MAXIMUM OF NINE SEMESTER UNITS

<b>FPAT 2906</b> - Fire Apparatus and Equipment (3.00)	←	No Course Articulated
<b>FPAT 2907</b> - Fire Hydraulics (3.00)	←	No Course Articulated
<b>FPAT 2908</b> - Fire Investigation I (3.00)	←	No Course Articulated
<b>FPAT 2909</b> - Fire Company Officer (3.00)	←	No Course Articulated
<b>FPAT 2910</b> - Structural Firefighting (3.00)	←	No Course Articulated
<b>FPAT 2911</b> - Hazardous Materials I (3.00)	←	No Course Articulated
<b>FPAT 2912</b> - Related Codes and Ordinances (3.00)	←	No Course Articulated
<b>FPAT 2913</b> - Emergency Medical Technical I (3.00)	←	No Course Articulated
<b>FPAT 2914</b> - Wildland Fire Control (3.00)	←	No Course Articulated
<b>FPAT 2915</b> - Hazardous Materials II (3.00)	←	No Course Articulated

### SPECIAL ADMINISTRATIVE TRACK ELECTIVE

<b>POLS 2810</b> - Quantitative Methods in Political Science (4.00)	←	No Course Articulated
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### DIVERSITY COURSES FOR CAL STATE LA GRADUATION REQUIREMENT

**\*\*REFER TO TOP OF AGREEMENT\*\***

<b>AAAS 1600</b> - History of Asia (3.00) Same-As: HIST 1600	←	No Course Articulated
<b>AAAS 1700</b> - Understanding Contemporary Asia (3.00)	←	No Course Articulated
<b>AAAS 2000</b> - Pacific Asian Culture, People, & Society (3.00)	←	No Course Articulated

<b>COUN 2020</b> - Integrtion of Adults with Disabilities in the U.S. Society (3.00)	←	No Course Articulated
<b>COUN 2250</b> - Diversity and Awareness of Self and Others for Helping Professionals (3.00)	←	No Course Articulated
<b>ENGL 2500</b> - Literary Los Angeles (3.00)	←	No Course Articulated
<b>GGOG 1550</b> - Cultural Geography (3.00)	←	<b>GGOG 2</b> - Cultural Geography (3.00)
<b>HIST 1010</b> - World History to 1500 CE (3.00)	←	No Course Articulated
<b>HIST 1020</b> - World History since 1500 CE (3.00)	←	No Course Articulated
<b>HIST 1600</b> - History of Asia (3.00) Same-Ac: AAAS 1600	←	No Course Articulated
<b>HIST 2010</b> - Early American History (3.00)	←	<b>HIST 16</b> - U.S. History (3.00)
<b>HIST 2020</b> - Recent United States History (3.00)	←	<b>HIST 17</b> - Post-Civil War - U.S. History (3.00)
<b>HNRS 2210</b> - Reading Los Angeles: Engaging Cultural Expressions in a Global City (3.00)	←	No Course Articulated
<b>LAS 1500</b> - Introduction to Latin American Studies (3.00)	←	No Course Articulated
<b>LAS 2550</b> - Diverse Latin American Populations in Southern California (3.00) Same-Ac: CLS 2040	←	No Course Articulated
<b>LBS 2400</b> - Introduction to Environmental Humanities (3.00)	←	No Course Articulated
<b>LBS 2500</b> - Social Change and Social Movements in the U.S. (3.00)	←	No Course Articulated
<b>LBS 2666</b> - Science Fiction Film and Television (3.00) Same-Ac: TVF 2666	←	No Course Articulated
<b>PHIL 2000</b> - Introduction to Comparative Religions (3.00) Same-Ac: RELS 2000	←	No Course Articulated
<b>PHIL 2200</b> - Contemporary Moral and Social Issues: An Intersectional Approach (3.00)	←	No Course Articulated
<b>HNRS 2210</b> - Reading Los Angeles: Engaging Cultural Expressions in a Global City (3.00)	←	No Course Articulated
<b>PHIL 2300</b> - Meanings of Human Life: An Intersectional Approach (3.00)	←	No Course Articulated
<b>PHIL 2400</b> - Philosophy of Film (3.00)	←	No Course Articulated
<b>RELS 2000</b> - Introduction to Comparative Religions (3.00) Same-Ac: PHIL 2000	←	No Course Articulated
<b>SOC 1001</b> - Individual Development in Diverse Contexts (3.00) * Minimum grade required: C or better	←	No Course Articulated
<b>SOC 1200</b> - Intimate Relationships in Our Diverse Society (3.00) Same-Ac: CHDY 1200	←	No Course Articulated
<b>SOC 2010</b> - Introduction to Sociology (3.00)	←	<b>SOC 1</b> - Introduction to Sociology (3.00)
<b>TVF 1938</b> - History of Comic Books (3.00)	←	No Course Articulated
<b>TVF 2500</b> - Media, Culture and Identity (3.00)	←	No Course Articulated
<b>TVF 2666</b> - Science Fiction Film and Television (3.00) Same-Ac: LBS 2666	←	No Course Articulated
<b>WGSS 1010</b> - Gender and Sexuality in College (3.00)	←	No Course Articulated
<b>WGSS 2000</b> - Introduction to Women's, Gender, and Sexuality Studies (3.00)	←	No Course Articulated

## RACE & ETHNICITY COURSES FOR CAL STATE LA GRADUATION REQUIREMENT

\*\*REFER TO TOP OF AGREEMENT\*\*

<b>AAAS 1400</b> - Introduction to Globalization, Race and Place (3.00) Same-Ac: PAS 1400, LAS 1400	←	No Course Articulated
<b>AAAS 1500</b> - Asian-American History (3.00) Same-Ac: HIST 1500	←	No Course Articulated
<b>AAAS 2100</b> - Asian America: Culture, History, and Community (3.00)	←	No Course Articulated
<b>AAAS 2200</b> - Asia and Asian American in Literature, Arts, and Media (3.00)	←	No Course Articulated

<b>AAAS 2630 - Asian-American Experience (3.00)</b>	☞	No Course Articulated
<b>CLS 1200 - Chicanas/os Latinas/os, Gender, and Class in the US Experience (3.00)</b>	☞	No Course Articulated
<b>CLS 1300 - The Constitution, Equity and Chicanas/os and Latinas/os (3.00)</b>	☞	No Course Articulated
<b>CLS 1500 - Cultural Diversity, Chicanas/os, and Latinas/os (3.00)</b>	☞	No Course Articulated
<b>CLS 1600 - Cultural Expressions in the Americas (3.00)</b>	☞	No Course Articulated
<b>CLS 2010 - Modern Mexican Literature in Translation (3.00)</b>	☞	No Course Articulated
<b>CLS 2050 - Chicanas/os and Latinas/os in Film and Popular Culture (3.00)</b>	☞	No Course Articulated
<b>CLS 2060 - Latina/o Images in Media, Social Media, and Digital Communication Systems (3.00)</b>	☞	No Course Articulated
<b>CLS 2100 - Chicana/o and Latina/o Political and Social Movements (3.00)</b>	☞	No Course Articulated
<b>CLS 2300 - Family Structure in the Americas (3.00)</b>	☞	No Course Articulated
<b>ENGL 2665 - Race and Ethnicity in Science Fiction (3.00) Same-Ac: LBS 2665</b>	☞	No Course Articulated
<b>HIST 1500 - Asian-American History (3.00) Same-Ac: AAAS 1500</b>	☞	No Course Articulated
<b>HIST 2050 - Race and Ethnicity in United States History (3.00)</b>	☞	No Course Articulated
<b>LAS 1020 - The African Diaspora in the Americas (3.00) Same-Ac: PAS 1020</b>	☞	No Course Articulated
<b>LAS 1400 - Introduction to Globalization, Race and Place (3.00) Same-Ac: PAS 1400, AAAS 1400</b>	☞	No Course Articulated
<b>LBS 2340 - Multicultural Arts, LA. (3.00)</b>	☞	No Course Articulated
<b>LBS 2665 - Multicultural Science Fiction (3.00) Same-Ac: ENGL 2665</b>	☞	No Course Articulated
<b>PAS 1020 - The African Diaspora in the Americas (3.00) Same-Ac: LAS 1020</b>	☞	No Course Articulated
<b>PAS 1100 - Racial Equality, Government and the Constitution (3.00)</b>	☞	No Course Articulated
<b>PAS 1200 - Elementary African Language and Culture (3.00)</b>	☞	No Course Articulated
<b>PAS 1400 - Introduction to Globalization, Race and Place (3.00) Same-Ac: LAS 1400, AAAS 1400</b>	☞	No Course Articulated
<b>PAS 1500 - Black Oral Traditions and Communication (3.00)</b>	☞	No Course Articulated
<b>PAS 1510 - African American History (3.00)</b>	☞	No Course Articulated
<b>PAS 1800 - Critical Race Theory (3.00)</b>	☞	No Course Articulated
<b>PAS 2010 - Third World Literature (3.00)</b>	☞	No Course Articulated
<b>PAS 2020 - African American Religion as Civic Culture (3.00)</b>	☞	No Course Articulated
<b>PAS 2210 - African American Music as History and Criticism (3.00)</b>	☞	No Course Articulated
<b>PAS 2500 - African History (3.00)</b>	☞	No Course Articulated
<b>PAS 2600 - Third World Images in Film (3.00)</b>	☞	No Course Articulated
<b>PHIL 2230 - Diversity and Justice (3.00)</b>	☞	No Course Articulated
<b>SDC 2630 - Asian-American Experience (3.00)</b>	☞	No Course Articulated
<b>SPAN 2420 - Hispanic Societies through Literature (3.00)</b>	☞	No Course Articulated
<b>WGSS 2030 - Gender and Race in the United States (3.00)</b>	☞	No Course Articulated
<b>WGSS 2200 - Chicanas and Latinas in Contemporary U.S. Society (3.00) Same-Ac: CLS 2200</b>	☞	No Course Articulated
<b>WGSS 2300 - Gender, Sexuality, and American Indian Communities (3.00)</b>	☞	No Course Articulated

END OF AGREEMENT

# **Appendix B: Professional and Volunteer Firefighter Courses**

- **Fire Instructors**
  - FS 64 Instructor 1 Instructional Methodology Instructor 1.0 Unit (State Fire Training)
  - FS 64B Instructor II-Instructional Development 2.0 Units (State Fire Training)
- **Company Officer Courses** Designed for students who have been working as Firefighter/Engineers (paid or volunteer) and intend on becoming Engine Captains/Company Officers.
  - FS 92A Company Officer 2A-Human Resource Management for Company Officers (NFPA Fire Officer Level 1 and II) 2.0 Units (State Fire Training)
  - FS 92B Company Officer 2B -General Administrative Functions for Company Officers (NFPA Fire Officer Level 1 and II) 1.0 Unit (State Fire Training)
  - FS 92C Company Officer 2C: Fire Inspections and Investigation for Company Officers (NFPA Fire Officer Level 1 and II) 2.0 Units (State Fire Training)
  - FS 92D Company Officer 2D: All-Risk Command Operations (NFPA Fire Officer Levels I and II) 2.0 Units (State Fire Training)
  - FS 92E Company Officer 2E-Wildland Incident Operations for Company Officers (NFPA Fire Officer Level 1 and II) 2.0 Units (State Fire Training)
- **Driver Operator Series**
  - FS 65A Driver/Operator 1A: Emergency Vehicle Operations 1.5 Units (State Fire Training)
  - FS 65B Driver/Operator 1B: Pump Operations 1.5 Units (State Fire Training)
  - FS 65C Wildland Fire Apparatus Operations 0.5 Unit (State Fire Training)
- **Volunteer Firefighter Courses:**
  - FS 65A Driver/Operator 1A: Emergency Vehicle Operations 1.5 Units (State Fire Training)
  - FS 59 Confined Space Awareness 0.5 Unit (State Fire Training)
  - FS 97 Fire Control 4: Controlling Ignitable Liquids and Gases 0.5 Unit (State Fire Training)
  - All Professional Development plus:
    - FS 98.21 Volunteer Firefighter Academy 2.5 Units
    - FS 156 Pump Operations 0.0 Unit
- Heavy Equipment Operators Courses:** FS 98.20 Incident Safety Awareness for Hired Vendors 0.5 Unit (State Fire Training)



# Appendix C: Signed Curriculum Review Form

Lassen Community College  
Status of Curriculum Reviews

**Fire Technology Instructional Program Review:**

**Status of Curriculum Review 11/29/2022**

Course Name	Curriculum Committee Review Completed	Curriculum Committee Review <u>Not</u> Completed	Course SLO mapping reviewed
EMT 21 Emergency Medical Responder	11/29/2022		01/19/2021
FS 3 Fundamentals of Fire Prevention	09/20/2022		03/02/2021
FS 4 Fire Protection Equipment and Systems	09/20/2022		03/02/2021
FS 5 Fire Organization and Management	09/20/2022		12/01/2020
FS 6 Building Construction for Fire Protection	09/20/2022		03/02/2021
FS 8 Wildland fire Suppression	10/04/2022		12/01/2020
FS 13 Fire Behavior and Combustion	09/20/2022		03/02/2021
FS 14 Principles of Fire Safety and Survival	09/20/2022		03/02/2021
FS 20 First Aid-CPR or Public Safety	10/04/2022		12/01/2020
FS 23 Firing Operations S-219	10/04/2022		03/02/2021
FS 26 Basic Air Operations (S-270).	10/04/2022		05/18/2021
FS 49 FS Work Experience	11/15/2022		11/15/2022
FS 50 Rapid Intervention Crew (RIC) Operations	10/04/2022		05/18/2021
FS 51 Introduction to Fire Technology Careers	10/04/2022		12/01/2020
FS 56 Helicopter Crew Member	10/04/2022		02/16/2021
FS 57 Vehicle Extrication	10/04/2022		05/18/2021
FS 59 Confined Space Awareness	10/04/2022		05/25/2021
FS 60 Cal Fire Firefighter Academy	08/16/2022		05/18/2021
FS 60A Basic Fire Crew Firefighter	10/04/2022		05/25/2021

Lassen Community College  
Status of Curriculum Reviews

FS 60B Fire Crew Firefighter (Cal Fire Seasonal)	10/04/2022		1/18/2022
FS 61 Basic Firefighter Training (Basic 32)	10/04/2022		12/01/2020
FS 64 Fire Instructor 1 Instructional Methodology	10/04/2022		05/18/2021
FS 64B Instructor II Instruct Develop	10/04/2022		05/04/2021
FS 65A Driver Operator IA	10/04/2022		05/04/2021
FS 65B Driver Operator 1B	10/04/2022		05/04/2021
FS 65C Driver Operator 1C	10/04/2022		05/04/2021
FS 70 Heavy Equipment Boss (S-236)	10/4/2022		05/04/2021
FS 70A Single Resource Boss Academy	10/04/2022		05/04/2021
FS 70B Engine Boss (Single Recourse)	10/04/2022		05/04/2021
FS 70C Single Resource Crew Boss	10/04/2022		05/04/2021
FS 72 HazMat First Responder Op	10/04/2022		05/04/2021
FS 72A HazMat First Responder Refresher	10/04/2022		05/04/2021
FS 72B HazMat First Responder Operation- Decontamination	10/04/2022		05/18/2021
FS 73A Incident Business Management(S-260)	09/20/2022		9/20/2022
FS 74 Fire in the Interface (S-215)	10/04/2022		12/01/2020
FS 75 Fire Behavior (S290)	10/04/2022		05/18/2021
FS 76 Firefighter Type 1 (Squad Boss) S-131	10/04/2022		05/04/2021
FS 78 Fellowship to Leadership L-280	10/04/2022		12/01/2020
FS 80 Firefighter Survival	10/04/2022		05/18/2021
FS 81 Wildland Firefighter Safety and Survival	10/04/2022		12/01/2020
FS 84 Lessons Learned (Fatality Fire Case Studies)	11/1/2022 inactivated		02/16/2021
FS 85 Understanding Maps, Compass & GPS	10/04/2022		05/04/2021

Lassen Community College  
Status of Curriculum Reviews

FS 87 Expanded Dispatch Record	10/04/2022		10/18/2022
FS 89 Wildfire Chainsaws (S212)	09/20/2022		12/01/2020
FS 90 Portable Pumps and Water Use (S211)	10/18/2022		2/16/2022
FS 92A Company Officer 2A- Human Resources Management for Company Officers	10/04/2022		05/04/2021
FS-92B Company Officer 2B - General Administrative Functions for Company Officers	10/04/2022		05/04/2021
FS-92C Company Officer 2C - Fire Inspections and Investigation for Company Officers	10/04/2022		05/04/2021
FS 92D Company Officer 2D: All-Risk Command Operations	10/04/2022		05/04/2021
FS-92E Company Officer 2E - Wildland Incident Operations for Company	10/04/2022		05/04/2021
FS 93 Fire Fighter I	10/04/2022 Inactivated		1/18/2022
FS 94 Strike Team Leader (S330)	10/04/2022		05/04/2021
FS 95 - Initial Attack Incident Command (S-200)	10/04/2022		05/04/2021
FS 96 Low Angle Rope Rescue	10/04/2022		05/04/2021
FS 97 Fire Control 4: Controlling Ignitable Liquids and Gases	10/04/2022		05/04/2021
FS 98.18 Annual Fireline Safety Refresher Training	10/04/2022		05/04/2021
FS 98.20 Annual Hired Equip Ref	10/04/2022		05/04/2021
FS 98.21 Volunteer fire Academy	10/04/2022		05/04/2021
FS 156 Pump Operation	10/04/2022		05/04/2021
<b>Degrees &amp; Certificates</b>			<b>Program PSLO mapping reviewed</b>
AS Fire Technology	11/01/2022		11/01/2022
CA Fire Technology	11/01/2022		11/01/2022
CA Basic Wildland Firefighter	11/01/2022		11/01/2022

Lassen Community College  
Status of Curriculum Reviews

COA Cal Fire Basic Academy	11/01/2022		11/01/2022
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 12/6/22  
\_\_\_\_\_  
Dan Weaver, Fire Science Director Signature Date

 11/29/2022  
\_\_\_\_\_  
Tom Downing, Curriculum and Academic Standards Committee Co-Chair Signature Date

 12/1/2022  
\_\_\_\_\_  
Michell Williams, Interim Dean of Instructional Services Date

**Appendix D:  
Available Fire Technology Student Survey  
Hard Copies by Year**

Academic Year: 2020-2021

<b>FALL 2020</b>			
<b>Class Section #</b>	<b>Class Name</b>	<b>Date</b>	<b>Instructor</b>
FS-64-M1214	Instructor 1	12/14/2020 - 12/18/2020	S. Hitchcock
FS-61-M0519	Basic Firefighter (basic 32)	09/14/2020 - 12/07/2020	D. Higgins
FS-13-K1113	Fire Behavior and Combustion	10/13/2020 - 12/10/2020	A. Butler
FS-5-K2054	Fire Orientation and Org.	10/19/2020 - 12/16/2020	A. Butler
FS-13-M0706	Fire Behavior and Combustion	10/19/2020 - 12/16/2020	M. Rivas
FS-20-M1221	1st Aid/Cpr Pub Emp	11/06/2020 - 11/20/2020	C. Myers
FS-51-M2055	Intro to Fire Careers	10/15/2020 - 10/16/2020	G. Robinson
FS-57-K1223	Vehicle Extrication	10/30/2020 - 11/01/2020	R. Brown
FS-59-M2062	Confined Space Awareness	10/02/2020 - 10/02/2020	R. Brown
FS-72-M1291	HazMat First Responder	10/23/2020 - 10/25/2020	R. Brown
FS-80-M1068	Firefighter Survival	09/25/2020 - 09/26/2020	R. Brown
FS-81-M1114	Wildland Firefighter Safety	10/30/2020 - 10/30/2020	G. Robinson

<b>Spring 2021</b>			
<b>Class Section #</b>	<b>Class Name</b>	<b>Date</b>	<b>Instructor</b>
FS 14-M3863	Principles of Fire Safety & Survival	01/19/2021 - 03/23/2021	M. Rivas
FS-72B-K3554	Hazmat- Decon	04/26/2021 - 04/26/2021	B. Medvin
FS 72-K3556	HazMat FRO	04/23/2021 - 04/25/2021	B. Medvin
FS-156-M4875	Pump Operations	05/15/2021 - 05/16/2021	D. Weaver
FS-92B-M3826	Company Officer 2B Gen Admin	02/05/2021 - 02/07/2021	S. Hitchcock
FS-92A-M3553	Company Officer 2A: HR Manage	01/09/2021 - 01/17/2021	R. Brown
FS 8-M3540	Wildland Fire Suppression	1/14/2021-4/8/2021	M. Rivas
FS-92C-M3827	Company Officer 2C: Fire Insp	02/08/2021 - 02/12/2021	J. Weaver
FS-95-M3552	Initial Attack Incident Comm	02/26/2021 - 02/27/2021	J. Weaver, E.
FS-65A-M3865	Driver Operator 1A	03/22/2021 - 03/26/2021	J. Weaver
FS 65B-M3866	Driver Operator 1B	04/26/2021 - 04/30/2021	R. Brown
FS 64B-M3550	Instructor 2	02/01/2021-02/05/2021	J. Weaver
FS-61-M4800	Basic Firefighter (basic 32)	03/29/2021 - 04/02/2021	M. Rivas
FS-156-M4875	Pump ops	05/15/2021 - 05/16/2021	D Weaver
FS 96-M3875	Low Angle Rope Rescue	04/09/2021 - 04/11/2021	R. Brown

Academic Year 2021-2022

<b>FALL 2021</b>			
<b>Class Section #</b>	<b>Class Name</b>	<b>Date</b>	<b>Instructor</b>
FS 60-O5325	Wildland Fire Fighter (Cal Fire)	09/14/2021 - 12/18/2021	G. Mena
FS 72-M1291	Haz Mat FRO	10/15/2021 - 10/17/2021	B. Medvin
FS 61-M0519	Basic Fire fighter (basic 32)	09/13/2021 - 12/06/2021	D. Higgins
FS 4- M0835	Fire Protection Equipment	10/11/2021 - 12/06/2021	D. Weaver
FS 64-M0983	Instructor 1	12/13/2021 - 12/17/2021	S. Hitchcock
FS 92D M2065	Company Officer 2D-All Risk	11/29/2021 - 12/03/2021	D. weaver
FS 92E M2066	Company Officer 2E- Wildland	12/06/2021 - 12/10/2021	S. Hitchcock
FS 5- M0863	Fire Orientation and Organization	10/12/2021 - 12/14/2021	M. Rivas
FS 59-M2062	Confined Space Awareness	09/24/2021	R. Brown
FS 81-M1114	Wildland Firefighter Safety and Survival	10/22/2021	G. Robinson
FS 51-M2059	Intro to Fire Careers	10/06/2021 - 10/10/2021	G. Robinson

<b>Spring 2022</b>			
<b>Class Section #</b>	<b>Class Name</b>	<b>Date</b>	<b>Instructor</b>
FS 94-M3599	Strike Tam /Risk Force Leader	01/31/2022 - 02/03/2022	S. Hitchcock
FS 92A M3553	Company Officer 2A; Human Resources	01/10/2022 - 01/13/2022	R. Brown
FS 59-O3708	Confined Space Awareness	01/14/2022	C. Sherfy
FS 80-M3874	Firefighter Survival	02/04/2022 - 02/05/2022	R. Brown
FS 20-04771	First Aid/CPR for Public Employees	01/10/2022 - 01/15/2022	D. Fehler
FS 60-O5325	Wildland Firefighter (Cal Fire)	01/10/2022 - 02/25/2022	C. Sherfy
FS 92C-M3827	Company Officer 2C Fire Inspection and Investigation	02/28/2022 - 03/04/2022	D. Weaver
FS 98.21-M4453	Volunteer Firefighter	01/20/2022 - 04/28/2022	D. Weaver
FS 89 M4524	Fire Chainsaws	04/22/2022 - 04/24/2022	A. Butler



**Appendix E:  
FS 13 and FS 14  
Enrollment Totals including Offering Location**

FS 13 and FS 14 Enrollment totals and by location					
	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
FS 13 TOTALS:					
FS 13-TOTAL including drops	13	10	26	7	24
FS -13 TOTAL Without drops	4	10	22	7	22
FS 13 BY LOCATION					
FS-13 on campus Including drops	13	-	10	-	18
FS -13 Firehouse including drops	-	10	16	7	6
FS 14 TOTALS:					
FS-14 TOTAL including drops	20	21	22	8	TBA
FS -14 TOTAL without drops	15	17	21	6	TBA
FS 14 BY LOCATION					
FS-14 on campus including drops	7	10	10	-	TBA
FS -14 Firehouse including drops	13	11	12	8	TBA

# Appendix F: Fire Technology Advising Plans

# FIRE TECHNOLOGY

## Certificate of Achievement

### Fire Technology

Required Core Courses: 18 units

HDSP FIREHOUSE

Total Elective Units: 12 units

Total Units: 30 units

Course Number	Course Title	Fall	Spring	Sum
FS 3	Fundamentals of Fire Prevention		3	
FS 4	Fire Protection Equipment and Systems			3
FS 5	Fire Organization and Management	3		
FS 6	Building Construction for Fire Protection			3
FS 13	Fire Behavior and Combustion	3		
FS 14	Principles of Fire Safety and Survival		3	

**Required Electives:** Select 12 units from the following

Course Number	Course Title	Fall	Spring	Summer
EMT21	Emergency Medical Responder	2		
FS 49	Fire Technology Work Experience	1-8	1-8	
FS 50	Rapid Intervention Crew (RIC) Operations	1		
FS 51	Introduction to Fire Technology Careers		1	
FS 52	Incident Command System (I 200/300)	2		
FS 53	Intro to Incident Command System (I-100)	.5		
FS 54	National Incident Command System (I-700)	.5		
FS 57	Vehicle Extrication	1		
FS 59	Confined Space Awareness		.5	
FS 60	Wildland Firefighter (Cal Fire Basic)	Future plans		
FS 61	Basic Firefighter Training (Basic 32)		2	
FS 65A	Driver Operator 1A		1.5	
FS 65B	Driver Operator 1B			1.5
FS 65C	Wildland Fire Apparatus Operations			0.5
FS 72	HazMat First Responder Operations		1	
FS 72A	HazMat First Responder - Refresher	Scheduled	upon	request
FS 728	1-IazMat First Responder- Decontamination		0.5	
FS 74	Fire in the Interface (S-215)			1.5
FS 78	Followership to Leadership (L-280)			0.5
FS 80	Firefighter Survival			1.0
FS 81	Wildland Firefighter Safety and Survival		.5	
FS 84				
FS 85	Understanding Maps, Compass & GPS			1
FS 89	Wildland Fire Chainsaws (S-212)		1.5	
FS 90	Portable Pumps and Water Use (S-211)		1	
FS 93	Fire Fighter I	Future		Planning
FS 96	Low Angle Rope Rescue			0.5
FS 97	Fire Control 4: Controlling Ignitable Liquids and Gases			0.5
FS 98.18	Annual Fireline Safety Refresher Training		.5	

# FIRE TECHNOLOGY

## Associate in Science Degree Fire Technology

Required Core Courses: 18 units

Total Core Units: 30 units

Total Units: 60 units

	Course Title	Fall	Spring
FS 3	Fundamentals of Fire Prevention		3(even)
FS 4	Fire Protection Equipment and Systems	3(odd)	
FS 5	Fire Orientation and Organization	3	3
FS 6	Building Construction for Fire Protection	3(even)	
FS 13	Fire Behavior and Combustion	3(even)	
FS 14	Principles of Fire Safety and Survival		3 (odd)

Required Electives: Select 12 units from the following

	Course Title	Fall	Spring	Summer
BUS 25	Small Business Management		3	
BUS 27	Business Communications	3	3	
EMT 21	Emergency Medical Responder	2.5	2.5	
EMT 60	Emergency Medical Technician	8.5		
FS 8	Wildland Fire Suppression		2	
FS 20	First Aid/CPR for Public Safety Employees	1.5		
FS 23	Firing Operations (S-219)		1 (even)	
FS 26	Basic Air Operations (S-270)		1 (even)	
FS 49	Fire Science Cooperative Work Experience	1-8	1-8	1-8
FS 50	Rapid Intervention Crew (RIC) Operations		0.5	
FS 51	Introduction to Fire Technology Careers	1		
FS 56	Helicopter Crewmember (S-271)	Scheduled	as	needed
FS 57	Vehicle Extrication		1	
FS 59	Confined Space Awareness	0.5		
FS 60	Cal Fire Firefighter Academy (FFA)	5	5	
FS 60A	Basic Fire Crew Firefighter	3	3	3
FS 60B	Fire Crew Firefighter	3	3	3
FS 61	Basic Firefighter Training (Basic 32)	2	2	
FS 64	Fire Instructor I-Instructional Methodology	2		
FS 64B	Fire Instructor II-Instructional Development		2 (odd)	
FS 65A	Driver Operator 1A		1.5	
FS 65B	Driver Operator 1B		1.5	
FS 65C	Wildland Fire Apparatus Operations		0.5	
FS 70	Heavy Equipment Boss (S-236)		1 (even)	
FS 70A	Single Resource Academy (S-230, S-231, S-232)	Scheduled	as	needed
FS 70B	Engine Boss (Single Resources)	Scheduled	as	needed
FS 70C	Single Resource Crew Boss (S-230)	Scheduled	as	needed
FS 72	HazMat First Responder Operations	1		
FS 72A	HazMat First Responder – Refresher	Scheduled	as	needed

FS 72B	HazMat First Responder – Decontamination	Scheduled	as	needed
FS 72C	HazMat First Responder Awareness	Scheduled	as	needed
FS 73A	Incident Business Management (S-260)	1		
FS 74	Fire in the Interface (S-215)	1	1	
FS 75	Intermediate Wildland Fire Behavior (S-290)		2 (even)	
FS 76	Firefighter Type 1 (Squad Boss S-131)		.5 (even)	
FS 78	Followership to Leadership (L-280)		1	1
FS 80	Firefighter Survival	1		
FS 81	Wildland Firefighter Safety and Survival	0.5	0.5	
FS 85	Understanding Maps, Compass & GPS		0.5	
FS 87	Expanded Dispatch Recorder (D-110)		1(Agency	Request)
FS 89	Wildland Fire Chainsaws (S-212)		1.5	
FS 90	Portable Pumps and Water Use (S-211)		1 (odd)	
FS 92A	Company Officer 2A-Human Resource Management for Company Officers		2	
FS 92B	Company Officer 2B -General Administrative Functions for Company Officers		1	
FS 92C	Company Officer 2C: Fire Inspections and Investigation for Company Officers		2	
FS 92D	Company Officer 2D: All-Risk Command Operations	2		
FS 92E	Company Officer 2E-Wildland Incident Operations for Company Officers	2		
FS 94	Strike Team/Task Force Leader, All Hazards (AH-330)		1.5 (even)	
FS 95	Initial Attack Incident Command (S-200)		0.5 (odd)	
FS 96	Low Angle Rope Rescue		0.5	
FS 96A	Rope Rescue Awareness/Operations		1.5	
FS 97	Fire Control 4:Controlling Ignitable Liquids and Gases			0.5
FS 98.18	Annual Fireline Safety Refresher Training (RT-130)		0.5	
FS 98.20	Incident Safety Awareness for Hired Vendors		0.5	
FS 98.21	Volunteer Firefighter Academy		2.5	

**Electives:** 12 units numbered 1-99

**General Education Requirements:** 18 units

See a counselor to prepare your educational plan with the latest scheduling information.

# FIRE TECHNOLOGY

## Certificate of Achievement

### Basic Wildland Firefighter

Required Core Courses: 17.5 units

Total Core Units: 17.5 units

	<b>Course Title</b>	<b>Fall</b>	<b>Spring</b>
FS 5	Fire Orientation and Organization	3	3
FS 8	Wildland Fire Suppression		2
FS 20	First Aid/CPR for Public Safety Employees	1.5	
FS 51	Introduction to Fire Technology Careers	1	
FS 61	Basic Firefighter Training (Basic 32)	2	2
FS 72	HazMat First Responder Operations	1	
FS 74	Fire in the Interface (S-215)	1	
FS 81	Wildland Firefighter Safety and Survival	0.5	0.5
FS 85	Understanding Maps, Compass & GPS		0.5
FS 89	Wildland Fire Chainsaws		1.5
FS 90	Portable Pumps & Water Use (S-211)		1
FS 98.21	Volunteer Firefighter Academy		2.5

# FIRE TECHNOLOGY

## Certificate of Achievement

### Fire Technology

Required Core Courses: 18 units

Total Core Units: 30 units

	Course Title	Fall	Spring
FS 3	Fundamentals of Fire Prevention		3(even)
FS 4	Fire Protection Equipment and Systems	3(odd)	
FS 5	Fire Orientation and Organization	3	3
FS 6	Building Construction for Fire Protection	3(even)	
FS 13	Fire Behavior and Combustion	3(even)	
FS 14	Principles of Fire Safety and Survival		3 (odd)

Required Electives: Select 12 units from the following

	Course Title	Fall	Spring	Summer
BUS 25	Small Business Management		3	
BUS 27	Business Communications	3	3	
EMT 21	Emergency Medical Responder	2.5	2.5	
EMT 60	Emergency Medical Technician	8.5		
FS 8	Wildland Fire Suppression		2	
FS 20	First Aid/CPR for Public Safety Employees	1.5		
FS 23	Firing Operations (S-219)		1 (even)	
FS 26	Basic Air Operations (S-270)		1 (even)	
FS 49	Fire Science Cooperative Work Experience	1-8	1-8	1-8
FS 50	Rapid Intervention Crew (RIC) Operations		0.5	
FS 51	Introduction to Fire Technology Careers	1		
FS 56	Helicopter Crewmember (S-271)	Scheduled	as	needed
FS 57	Vehicle Extrication		1	
FS 59	Confined Space Awareness	0.5		
FS 60	Wildland Firefighter (CDF Basic 67)	5	5	
FS 60A	Basic Fire Crew Firefighter	3	3	3
FS 60B	Fire Crew Firefighter	3	3	3
FS 61	Basic Firefighter Training (Basic 32)	2	2	
FS 64	Fire Instructor I-Instructional Methodology	2		
FS 64B	Fire Instructor II-Instructional Development		2 (odd)	
FS 65A	Driver Operator 1A		1.5	
FS 65B	Driver Operator 1B		1.5	
FS 65C	Wildland Fire Apparatus Operations		0.5	
FS 70	Heavy Equipment Boss (S-236)		1 (even)	
FS 70A	Single Resource Academy (S-230, S-231, S-232)	Scheduled	as	needed
FS 70B	Engine Boss (Single Resources)	Scheduled	as	needed
FS 70C	Single Resource Crew Boss (S-230)	Scheduled	as	needed
FS 72	HazMat First Responder Operations	1		
FS 72A	HazMat First Responder – Refresher	Scheduled	as	needed
FS 72B	HazMat First Responder – Decontamination	Scheduled	as	needed
FS 72C	HazMat First Responder Awareness	Scheduled	as	needed



FS 73A	Incident Business Management (S-260)	1		
FS 74	Fire in the Interface (S-215)	1	1	
FS 75	Intermediate Wildland Fire Behavior (S-290)		2 (even)	
FS 76	Firefighter Type 1 (Squad Boss S-131)		.5 (even)	
FS 78	Followership to Leadership (L-280)		1	1
FS 80	Firefighter Survival	1		
FS 81	Wildland Firefighter Safety and Survival	0.5	0.5	
FS 85	Understanding Maps, Compass & GPS		0.5	
FS 87	Expanded Dispatch Recorder (D-110)		1(Agency	Request)
FS 89	Wildland Fire Chainsaws (S-212)		1.5	
FS 90	Portable Pumps and Water Use (S-211)		1 (odd)	
FS 92A	Company Officer 2A-Human Resource Management for Company Officers		2	
FS 92B	Company Officer 2B -General Administrative Functions for Company Officers		1	
FS 92C	Company Officer 2C: Fire Inspections and Investigation for Company Officers		2	
FS 92D	Company Officer 2D: All-Risk Command Operations	2		
FS 92E	Company Officer 2E-Wildland Incident Operations for Company Officers	2		
FS 93	Fire Fighter 1 Academy		18.5	
FS 94	Strike Team/Task Force Leader, All Hazards (AH-330)		1.5 (even)	
FS 95	Initial Attack Incident Command (S-200)		0.5 (odd)	
FS 96	Low Angle Rope Rescue		0.5	
FS 96A	Rope Rescue Awareness/Operations		1.5	
FS 97	Fire Control 4: Controlling Ignitable Liquids and Gases			0.5
FS 98.18	Annual Fireline Safety Refresher Training (RT-130)		0.5	
FS 98.20	Incident Safety Awareness for Hired Vendors		0.5	
FS 98.21	Volunteer Firefighter Academy		2.5	

**FIRE TECHNOLOGY**  
**Certificate of Accomplishment**  
**CAL FIRE ACADEMY**

Required Core Courses: 12.5 units

Total Core Units: 12.5 units

	<b>Course Title</b>	<b>Fall</b>	<b>Spring</b>
FS 20	First Aid/CPR for Public Employees	1.5	
FS 51	Introduction to Fire Technology Careers	1	
FS 59	Confined Space Awareness	0.5	
FS 60	CAL-FIRE Basic Training	5	
FS 61	Basic Firefighter Training (Basic 32)	2	2
FS 72	HazMat First Responder Operations	1	
FS 80	Firefighter Survival	1	
FS 81	Wildland Firefighter Safety and Survival	0.5	0.5

# **Appendix G: Fire Technology Advisory Committee List**

## 2022-2024 Lassen College Fire Technology Program Advisory Committee

Individual	Agency	Job Title	Email	Contact Number	
Kim Keith	Alliance for Workforce Development	Agency Representative	<a href="mailto:kkeith@ncen.org">kkeith@ncen.org</a>	530-257-5057	Voting
Grant Gifford	Bureau of Land Management	Training Officer	<a href="mailto:ggifford@blm.gov">ggifford@blm.gov</a>	530-252-5301	Voting
Joe Walton	CAL FIRE	Battalion Chief B2207	<a href="mailto:Joe.walton@fire.ca.gov">Joe.walton@fire.ca.gov</a>	530-310-2207	Voting
Ryan Danielson	CAL FIRE	Training Officer	<a href="mailto:ryan.danielsen@fire.ca.gov">ryan.danielsen@fire.ca.gov</a>	(530) 256-3589	Voting
Nick Garcia	CAL FIRE	Fire Captain Training/Safety	<a href="mailto:Nick.garcia1@fire.ca.gov">Nick.garcia1@fire.ca.gov</a>	530-310-2227	Voting
Pat Benninghoven	CAL FIRE-SVT	Battalion Chief	<a href="mailto:pat.benninghoven@fire.ca.gov">pat.benninghoven@fire.ca.gov</a>	530-257-2727	Voting
Dean Fehler	CAL FIRE-SVT	Administrative Captain	<a href="mailto:dean.fehler@fire.ca.gov">dean.fehler@fire.ca.gov</a>	530-257-2727	Voting
Chris Hallmark	CCC/HDSP Fire Department	Fire Chief	<a href="mailto:chris.hallmark@cdcr.ca.gov">chris.hallmark@cdcr.ca.gov</a>	530-257-4311 ext. 5000	Voting
Mike Wilson-Young	CCC/HDSP Fire Department	Fire Captain	<a href="mailto:michael.wilson-young@cdcr.ca.gov">michael.wilson-young@cdcr.ca.gov</a>	530-257-2181 ext. 4311	Voting
Brad Medvin	CCC/HDSP Fire Department	Fire Captain	<a href="mailto:bradley.medvin@cdcr.ca.gov">bradley.medvin@cdcr.ca.gov</a>	530.257.2181 x4311	Voting
Joel Ehrlich	Janesville Fire Protection District	Fire Chief	<a href="mailto:ifpdjoelehrlich@frontier.com">ifpdjoelehrlich@frontier.com</a>	530-253-3737	Voting
Ernie Coe	Janesville Fire Protection District	Fire Captain / Training	<a href="mailto:jvhazmat@gmail.com">jvhazmat@gmail.com</a>	530-253-2177	Voting
Mike Rivas	Lassen Community College	Adjunct Fire Tech Faculty	<a href="mailto:mrivas@lassencollege.edu">mrivas@lassencollege.edu</a>	530-251-8829	Voting
Christi Myers	Norcal EMS	BSN, RN, PHN	<a href="mailto:cmyers@lassencollege.edu">cmyers@lassencollege.edu</a>	530-257-6181 ext 8994	Voting
James Moore	Susanville Fire Department	Fire Chief	<a href="mailto:jmoore@cityofsusanville.org">jmoore@cityofsusanville.org</a>	530-257-5152	Voting
Leon Myers	Susanville Fire Department	Fire Captain	<a href="mailto:lmyers@cityofsusanville.org">lmyers@cityofsusanville.org</a>	530-249-7041	Voting
Brandie Cooper	Susanville Indian Rancheria	Natural Resources Director	<a href="mailto:bcooper@sir-nsn.gov">bcooper@sir-nsn.gov</a>	(530)-251-5636	Voting
Allen Schultze	USFS, Lassen National Forest	Forest Superintendent 9	<a href="mailto:allenschultze@usda.gov">allenschultze@usda.gov</a>	530-310-3471	Voting
Fernando Estrada	USFS, Lassen NF, Eagle Lake RD	Captain E-381	<a href="mailto:festrada02@usda.gov">festrada02@usda.gov</a>	530-252-6684	Voting
Wyatt Crum	USFS, Lassen National Forest	Forest Fire Training Officer		530-258-5414	Voting
Steve Hitchcock	Susan River Fire Department	Assistant Fire Chief	<a href="mailto:chiefhitch@gmail.com">chiefhitch@gmail.com</a>	530-258-5171	Voting
Morgan Nugent	Lassen High School	Superintendent/Principal	<a href="mailto:morgan.nugent@lassenhigh.org">morgan.nugent@lassenhigh.org</a>	530-257-5134	Voting
Michell Williams	Lassen Community College	Interim Dean of Instruction, CTE	<a href="mailto:Mwilliams@lassencollege.edu">Mwilliams@lassencollege.edu</a>	530-257-6181 X 8960	Non-Voting
Chad Lewis	Lassen Community College	Division Chair	<a href="mailto:clewis@lassencollege.edu">clewis@lassencollege.edu</a>	530-251-8812	Non-Voting
Dan Weaver	Lassen Community College	Fire Technology Director	<a href="mailto:dweaver@lassencollege.edu">dweaver@lassencollege.edu</a>	530-251-8829	Non-Voting
Anna Pasqua	Lassen Community College	Fire Technology ISAC	<a href="mailto:apasqua@lassencollege.edu">apasqua@lassencollege.edu</a>	530-251-8829	Non-Voting
Adam Runyan	Lassen Community College	Academic Counselor	<a href="mailto:arunyan@lassencollege.edu">arunyan@lassencollege.edu</a>	530-249-8321	Non-Voting