Fire Science

COMPREHENSIVE

REPORT OF PROGRAM DATA

AY18-19 to AY20-21

July 1, 2018 through June 30, 2021

UNIVERSITY of HAWAI'I®
HAWAI'I
COMMUNITY COLLEGE

Program or Unit Name: **Fire Science**

1. Program or Unit Description

Program or Unit Mission or Purpose Statement

The Fire Science Program prepares individuals with the academic knowledge for entry employment in the Fire Service field as well as meeting the needs of in-service professionals.

Upon completion of this program, students will have the knowledge to prepare for a career with federal, state, and local fire and emergency service agencies, with an emphasis on Structural Fire Fighting, Wildland Fire Suppression, Hazardous Materials Incidents, Fire Prevention and Investigation, Emergency Medical Technician, Fire Management and Administration, and Incident Command System.

After earning the Associate in Science (A.S.) Degree, students have the opportunity to pursue a bachelor's degree in Fire Administration from Eastern Oregon University through distance learning.

Health and physical requirements vary with different employers in the Fire Service field, so prospective students should seek advice before enrolling.

2. Analysis of the Program/Unit

College: Hawai'i Community College

Program: Fire Science

Status: Report Complete

Program Quantitative Indicators

Overall Program Health: Healthy

Workforce Alignment: Classification of Instructional Programs (CIP) -to- Standard Occupational Classification (SOC)

Fire Science
CIP Code = 43.0203

33-2021 - Fire Inspectors and Investigators

33-2011 - Firefighters

33-2022 - Forest Fire Inspectors and Prevention Specialists

Program or Unit Name: **Fire Science**

#	Demand Indicators	2018 - 19	2019 - 20	2020 - 21	Demand Health
1.	New and Replacement Positions (State)	206	138	155	Healthy
2.*	New and Replacement Positions (County Prorated)	53	24	30	
3.	Number of Majors	94	118	125	
3a.	Number of Majors Native Hawaiian	57	67	65	
3b.	Fall Full-Time	59%	59%	58%	
3c.	Fall Part-Time	41%	41%	42%	
3d.	Fall Part-Time who are Full-Time in System	3%	3%	1%	
3e.	Spring Full-Time	41%	42%	34%	
3f.	Spring Part-Time	59%	58%	66%	
3g.	Spring Part-Time who are Full-Time in System	3%	1%	4%	
4.	SSH Program Majors in Program Classes	1,092	1,521	1,439	
5.	SSH Non-Majors in Program Classes	62	20	44	
6.	SSH in All Program Classes	1,155	1,541	1,483	
7.	FTE Enrollment in Program Classes	38	51	49	
8.	Total Number of Classes Taught	24	26	29	

#	Efficiency Indicators	2018 - 19	2019 - 20	2020 - 21	Efficiency Health
9.	Average Class Size	17	20	17	Progressing
10.*	Fill Rate	66%	75.7%	82.3%	
11.	FTE BOR Appointed Faculty	1	1	1	
12.*	Majors to FTE BOR Appointed Faculty	94	118	125	
13.	Majors to Analytic FTE Faculty	31	39	42	
13a.	Analytic FTE Faculty	3	3	3	

Program or Unit Name: **Fire Science**

14.	Overall Program Expenditures	$138,941	$149,277	$513,061	
14a.	General Funded Budget Allocation	$135,883	$145,537	$466,531	
14b.	Special/Federal Budget Allocation	0	0	0	
14c.	Tuition and Fees	$3,058	$3,740	$46,530	
15.	Cost per SSH				
16.	Number of Low-Enrolled (<10) Classes	8	2	5	
#	**Effectiveness Indicators**	**2018 - 19**	**2019 - 20**	**2020 - 21**	**Effectiveness Health**
17.	Successful Completion (Equivalent C or Higher)	92%	90%	84%	
18.	Withdrawals (Grade = W)	2	8	13	
19.*	Persistence Fall to Spring	81%	78%	70%	
19a.	Persistence Fall to Fall	60%	60%	48%	
20.*	Unduplicated Degrees/Certificates Awarded	36	40	46	
20a.	Degrees Awarded	10	17	25	
20b.	Certificates of Achievement Awarded	30	23	33	**Healthy**
20c.	Advanced Professional Certificates Awarded	0	0	0	
20d.	Other Certificates Awarded	0	0	0	
21.	External Licensing Exams Passed [1]				
22.	Transfers to UH 4-yr	0	2	1	
22a.	Transfers with credential from program	0	1	0	
22b.	Transfers without credential from program	0	1	1	

[1] Campus to include in program analysis if applicable.

#	Distance Indicators	2018 - 19	2019 - 20	2020 - 21	
23.	Number of Distance Education Classes Taught	0	0	8	
24.	Enrollments Distance Education Classes	0	0	209	
25.	Fill Rate	0%	0%	76%	
26.	Successful Completion (Equivalent C or Higher)	0%	0%	80%	

Program or Unit Name: **Fire Science**

27.	Withdrawals (Grade = W)	0	0	7	
28.	Persistence (Fall to Spring Not Limited to Distance Education)	0%	0%	87%	
#	**Perkins Indicators**	**Goal**	**Actual**	**Met**	
29.	1P1 Postsecondary Placement	33	91.89	Met	
30.	2P1 Earned Recognized Credential	33	84.06	Met	
31.	3P1 Nontraditional Program Concentration	N/A	N/A	N/A	
32.	Placeholder - intentionally blank	N/A	N/A	N/A	
33.	Placeholder - intentionally blank	N/A	N/A	N/A	
34.	Placeholder - intentionally blank	N/A	0	N/A	
#	**Performance Indicators**	**2018 - 19**	**2019 - 20**	**2020 - 21**	
35.	Number of Degrees and Certificates	40	40	58	
36.	Number of Degrees and Certificates Native Hawaiian	26	30	25	
37.	Number of Degrees and Certificates STEM	Not STEM	Not STEM	Not STEM	
38.	Number of Pell Recipients[1]	21	16	18	
39.	Number of Transfers to UH 4-yr	0	2	1	

*** Used in Rubric to determine Health Indicator**

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https://uhcc.hawaii.edu/varpd/index.php?y=2021andc=HAWandt=CTEandp=2322

ARPD History

	AY 18-19	AY 19-20	AY 20-21
Overall Program Health	Healthy	Healthy	Healthy
Demand Health	Healthy	Healthy	Healthy
Efficiency Health	Progressing	Progressing	Progressing
Effectiveness Health	Healthy	Healthy	Healthy

As the chart above shows the Fire Science program has remained consistent.

Program or Unit Name: **Fire Science**

Demand: Healthy

The above figures indicate the demand for firefighters will continue. Students from the Fire Science program have also found employment with various federal agencies such as the National Park Service and United States Forest Service. One of my female students was recently hired as a permanent firefighter with Mesa Verde National Park in Colorado. Several of my students have found employment in the private sector such as Hilo Fire Extinguisher and Guardian Fire Protection companies.

The FS program currently has 125 majors with 52% Native Hawaiian enrollment. The FS program has one of the largest enrollment programs at the college, and enrollment continues to increase. I believe our reputation and the benefits of having a degree in Fire Science contributes to this increase. The numbers have been consistent for the past three years.

FTE Enrollment in Program Classes is 49 this year. The numbers have increased over the past three years, which coincides with the increase in enrollment. Total Number of Classes Taught this year was 29. We have had to increase sections of some classes due to COVID spacing requirements. We have also increased available courses at the Pālamanui Campus.

Efficiency: Progressing

Item 11: FTE BOR Faculty: – *One*

Item 12: Majors to Faculty -125: *This is how many students there are.*

Item 13: Majors to Analytic FTE Faculty – 42: *This is how many students **should** be assigned to one faculty member.*

Item 13A: Analytic FTE Faculty -3: *Therefore, this is how many faculty members we should have to run the program.*

Effectiveness: Healthy

Item 20A: Associate Science Degrees in Fire Science awarded- 25. This accounts for approximately 20% of all AS degrees awarded by the college annually.

The Fire Science program prepares students for a career with the various federal, state and local fire service agencies. The program also provides training for in-house employees, and private companies. A career as a firefighter is well rewarding with high pay and benefits. Firefighters serve as first responders, and provide an essential service to the population of the Island of Hawai'i such as: providing emergency medical services, fight fires, protects property, responds to hazardous material incidents, provide search and rescue on land and sea, protects the natural and cultural resources of Hawai`i.

Program or Unit Name: **Fire Science**

The demand for a well-trained professional fire department will continue. The population of the Island will continue to grow, and approximately 80% of all fire calls are Emergency Medical Services (EMS) related. Due to climate change we are now experiencing increased fire activity such as the Mana Rd. Fire which is the largest fire in the State of Hawai`i history (40,000 acres). A few years ago, the voters of Hawai`i Island approved the change in the County Charter that requires the Hawai`i Fire Department's Fire Chief to have the experience and education of a Bachelor of Science degree or equivalent. The Fire Commission recently hired Mr. Kazuo Todd as Fire Chief, who has as a BS degree in Fire Administration from Colorado State University.

Program Strengths:

- Consistent high enrollment with a three-year average of 112 students. Currently we have 125 FS majors.
- The FS program accounts for approximately 20% of all the AS degrees awarded annually by the college (for AY 2020-21, 58 degrees and certificates were awarded).
- Due to high enrollment and low administrative costs (125 majors to 1 BOR appointed faculty), the FS program generates a $50,000.00 surplus every AY.
- Number of Native Hawaiian majors is 63 per semester over a three-year average, with a current enrollment of 65 students.
- Successful completion (C or higher) for a three-year average is 87%.

The following areas are where the FS program needs support from the College Administration.

- Identify classroom space for afternoon and evening Fire Science and Emergency Medical Technician (EMT) classes.
- Allow HawCC to teach the required EMT classes for students to apply for Licensure from the Dept. of Commerce and Consumer Affairs (DCCA). Currently KCC has opposed this.
- The Honolulu Fire Dept. donated a $250,000.00 fire engine for students to have a hands-on experience. The engine has been parked in the open and exposed to the elements which is now slowly deteriorating. The College Administration needs to decide if they are going to provide a covered parking space for the engine or sell the engine.

Perkins Indicators	Goal	Actual	Met
1P1 Postsecondary Placement	33	91.89	Met
2P1 Earned Recognized Credential	33	84.06	Met

Program or Unit Name: **Fire Science**

Significant Program or Unit Actions

- Although the ARPD health indicators indicate the Fire Science program is solid, effective, and successful, I plan to continue assessing ways to improve the program. With Perkins funding I purchased two $50,000.00 Virtual Reality FLAIM fire suppression programs for both campuses. This allows students to experience firefighting without placing students in a live fire situation.

- I submitted a proposal to modify the FS curriculum by deleting EMT as a requirement for the FS AS degree and have EMT as a stand-alone Certificate of Competence degree. This would allow individuals to take EMT without having to take FS classes as lifeguards, park rangers, etc.

- Due to COVID in March 2020, we had one week to learn how to deliver FS courses via distance learning. We continued to deliver DE course for AY 19-20, AY20-21and AY 21-22.

- We have a signed Articulation Agreement with Eastern Oregon University, which allows our students who graduate the opportunity to obtain a Bachelor of Science Degree in Fire Administration through distance learning.

- We received approval from the State of Hawai`i Dept. of Health recognizing Hawai`i CC as an approved Emergency Medical Technician (EMT) training center. However, KCC has prohibited Haw CC from teaching the required hours for students to apply to the Department of Commerce and Consumer Affairs (DCCA) for Licensure as an EMT.

Program or Unit Name: **Fire Science**

3. Program Learning Outcomes or Unit/Service Outcomes

*a) List all Program Learning Outcomes (**PLO**s) or Unit/Service Outcomes (**UO**s) and their alignment to the College's Institutional Learning Outcomes (**ILO**s).*

FS PLO1: Meet the minimum academic training requirements of the National Fire Protection Association's (NFPA) Standard 1001, Standard for Fire Fighter Professional Qualifications (Fire Fighter I).

Linked Institution Outcomes

ILO1: Communicate effectively in a variety of situations.

ILO2: Utilize critical thinking to solve problems and make informed decisions.

ILO3: Apply knowledge and skills to make contributions to community that are respectful of the indigenous people and culture of Hawai‘i island, as well as other cultures of the world.

ILO6: Contribute to sustainable environmental practices for personal and community well-being.

FS PLO2: Perform as fully qualified wildland firefighters (FFT2) in accordance with National Wildfire Coordinating Group PMS 310-1 standards.

Linked Institution Outcomes

ILO1: Communicate effectively in a variety of situations.

ILO2: Utilize critical thinking to solve problems and make informed decisions.

ILO3: Apply knowledge and skills to make contributions to community that are respectful of the indigenous people and culture of Hawai‘i island, as well as other cultures of the world.

ILO6: Contribute to sustainable environmental practices for personal and community well-being.

FS PLO3: Utilize the Incident Command System to manage a wide variety of planned and un-planned incidents.

Linked Institution Outcomes

ILO1: Communicate effectively in a variety of situations.

ILO2: Utilize critical thinking to solve problems and make informed decisions.

ILO3: Apply knowledge and skills to make contributions to community that are respectful of the indigenous people and culture of Hawai‘i island, as well as other cultures of the world.

FS PLO4: Demonstrate knowledge of modern fire service strategies, tactics, and management for both structural and wildland fire incidents.

Linked Institution Outcomes

Program or Unit Name: **Fire Science**

ILO1: Communicate effectively in a variety of situations.

ILO2: Utilize critical thinking to solve problems and make informed decisions.

ILO3: Apply knowledge and skills to make contributions to community that are respectful of the indigenous people and culture of Hawai‘i island, as well as other cultures of the world.

ILO6: Contribute to sustainable environmental practices for personal and community well-being.

FS PLO5: Meet the requirements for National Fire Protection Association's (NFPA) 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents for the Awareness and Operational Levels.

Linked Institution Outcomes

ILO2: Utilize critical thinking to solve problems and make informed decisions.

ILO3: Apply knowledge and skills to make contributions to community that are respectful of the indigenous people and culture of Hawai‘i island, as well as other cultures of the world.

FS PLO6: Apply the principles of interpersonal communication, cooperative teamwork, supervision, and management for leadership in the fire service.

Linked Institution Outcomes

ILO1: Communicate effectively in a variety of situations.

ILO3: Apply knowledge and skills to make contributions to community that are respectful of the indigenous people and culture of Hawai‘i island, as well as other cultures of the world.

FS PLO7: Apply theoretical principles of the chemistry of fire and hydraulics to solve water supply problems.

Linked Institution Outcomes

ILO2: Utilize critical thinking to solve problems and make informed decisions.

FS PLO8: Take the National Registry Examination for certification as an Emergency Medical Technician.

Linked Institution Outcomes

ILO1: Communicate effectively in a variety of situations.

ILO2: Utilize critical thinking to solve problems and make informed decisions.

Program or Unit Name: **Fire Science**

ILO3: Apply knowledge and skills to make contributions to community that are respectful of the indigenous people and culture of Hawai‘i island, as well as other cultures of the world.

ILO5: Produce and perpetuate safe, healthy learning and professional environments that are respectful of social and individual diversity.

b) List the PLOs that have been assessed in the period of this Review.

FIRE PLOs 2, 3, 4, and 6 have been assessed during the three years of this Review through assessment of these courses:

FIRE 151, Initial Fall 2018; Closing the Loop Fall 2020

FIRE 157, Initial Spring 2021

FIRE 212, Initial Fall 2019; Closing the Loop Fall 2020

FIRE 151 - INTRODUCTION TO WILDLAND FIRE CONTROL	"CLO 1: Comprehend the basic fundamental parameters that effect wildland fire behavior."	PLO 2
	"CLO 2: Understand the established SAFETY protocols to minimize Risk Management."	PLO 2
	"CLO 3: Size-up the fire environment and develop a safe and effect suppression action."	PLOs 2, 3, 4, 6
	"CLO 4: Meet the minimum training requirements for a federal wildland firefighter."	PLO 2

FIRE 157 - INTERMEDIATE WILDLAND FIRE BEHAVIOR	"CLO 1: Develop an Intermediate knowledge of the parameters that effect wildland fire behavior."	PLOs 2, 4, 6
	"CLO 2: Be able to take weather observations in the field and analyze the data.”	PLO2
	"CLO 3: Be able to use FLAME GUIDE to	PLO 2

	predict wildland fire behavior."	

FIRE 212 - FIREFIGHTING STRATEGIES AND TACTICS	"CLO 1: Size-up and determine the appropriate strategies and tactics necessary for a safe and effective response to a fire incident."	PLO 4
	"CLO 2: Knowledge of building construction."	PLO 4

c) *Assessment Results: provide a detailed discussion of assessment results at the program (PLO) and course (CLO), or unit (UO), levels in the period of this Review. Provide an analysis of how these results reflect the strengths and challenges of the program or unit in meetings its Outcomes.*

Course/Program	Assessment Result Discussion
FIRE 151 - INTRODUCTION TO WILDLAND FIRE CONTROL	**Initial Fall 2018** Final exam taken by all students in the course. The exam covered all material in the course. All students in the course took the exam, which was scored by the instructor. Expectation was that 80% of students would meet or exceed the CLO. **Analysis:** Almost all students achieved this CLO. No changes to instruction or exam module. The Closing the Loop reassessment is scheduled for Fall 2020. **Assessment Strategy** The course instructor assessed the final exam for all students. The final exam covered all the material presented to the students during the semester. The material meets the National Wildfire Coordinating Group (NWCG) requirements for Firefighter Type I. **Results Analysis** CLOs 1,3, and 4 the results were 23 passed and two students failed. The results were 92% passed. This is very good results for an

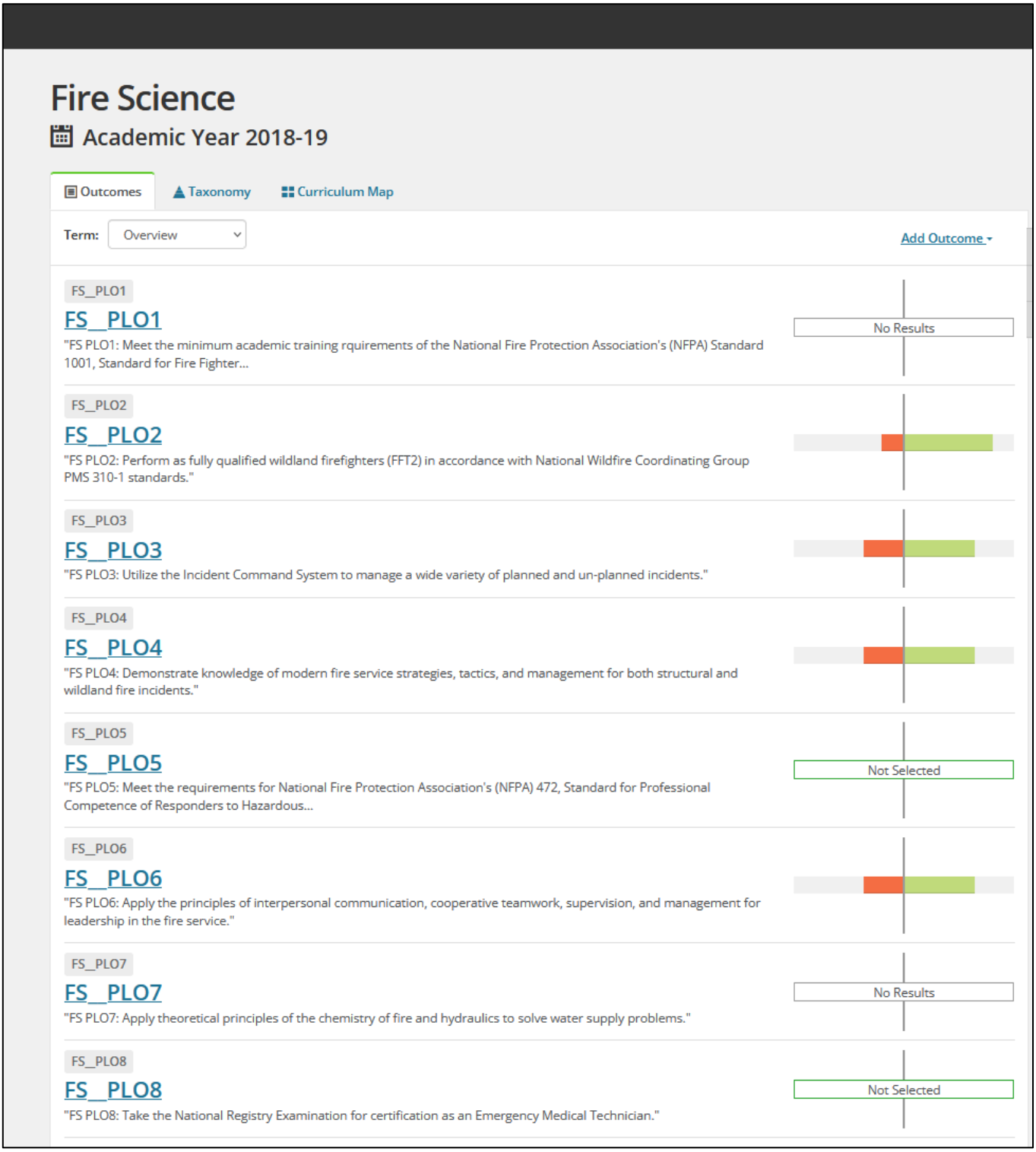
	Introductory class in wildland firefighting. CLO #2 results were not as strong with seven students failing. This required a comprehensive analysis of the five-step Risk Management Process which some students found challenging. The course works well with distance learning. Most students are able to achieve standards for most learning outcomes. Some students enter the course with unrealistic expectations of what is required to be a wildland firefighter. This course provides students with what is required to be a wildland firefighter. **Action Plan** Continue to emphasize that wildland firefighting is a potential hazardous occupation. However, there are steps that can be taken to minimize the risks involved. The National Wildfire Coordinating Group will update course material and will integrate that material into this course. The course material will be available for the Fall 21 semester.
FIRE 157 - INTERMEDIATE WILDLAND FIRE BEHAVIOR	**Results Analysis** Students are expected to score 70% or higher to pass this course. 1) ANALYSIS of the quantitative results reported above indicates that students had a hard time understanding the course contents. Scores indicate there is room for improvement. CLO2: needs more emphasis. This was the first time I taught the entire course via distance learning. When in the classroom, I can observe the student's facial expressions and body language. I believe this is an added tool to improve my teaching skills. 2) Discuss the STRENGTHS and CHALLENGES of the course OR unit. [max. 4,000 characters] This is a very technical course that requires an understanding of how fuels, topography, and weather influence wildland fire behavior, which requires many disciplines. The challenge is how to deliver a very complex subject matter in a way that students can understand. This has been a challenging course for students in the past, and not teaching face-to-face makes this more difficult. **Action Plan** I plan to emphasize areas where students are having a problem

	understanding. I have found that repeating the main points helps students with comprehension. This course is taught during the first year in college. Students are still learning to improve their study habits. Knowing this, I plan to put extra emphasis on the key points of this course.
FIRE 212 - FIREFIGHTING STRATEGIES AND TACTICS	**Assessment Strategy** Instructor created the final exam using national standards that are taught during course. The exams were scored by the instructor, who is the program coordinator for the Fire Science program. All 28 students who completed the course took the exam. **Results Analysis** 100% of students passed the national-standards-based exam. This shows that they have an understanding of what's required to size up and develop the appropriate strategies and tactics for a safe and effective response to a fire incident. Course strengths: These are all senior students, so at this point, this is their 2nd year in Fire Science. So they really have an understanding of what's required in the Fire Service. Course challenges: Making the course interesting and relevant. Instructor uses lots of visual presentations and then relates the course material to real fire incidents, local and national. **Action Plan** Maintain the teaching strategy, which is effective as is.

Program or Unit Name: **Fire Science**

FIRE SCIENCE Program AY18-19 PLO Assessment Results

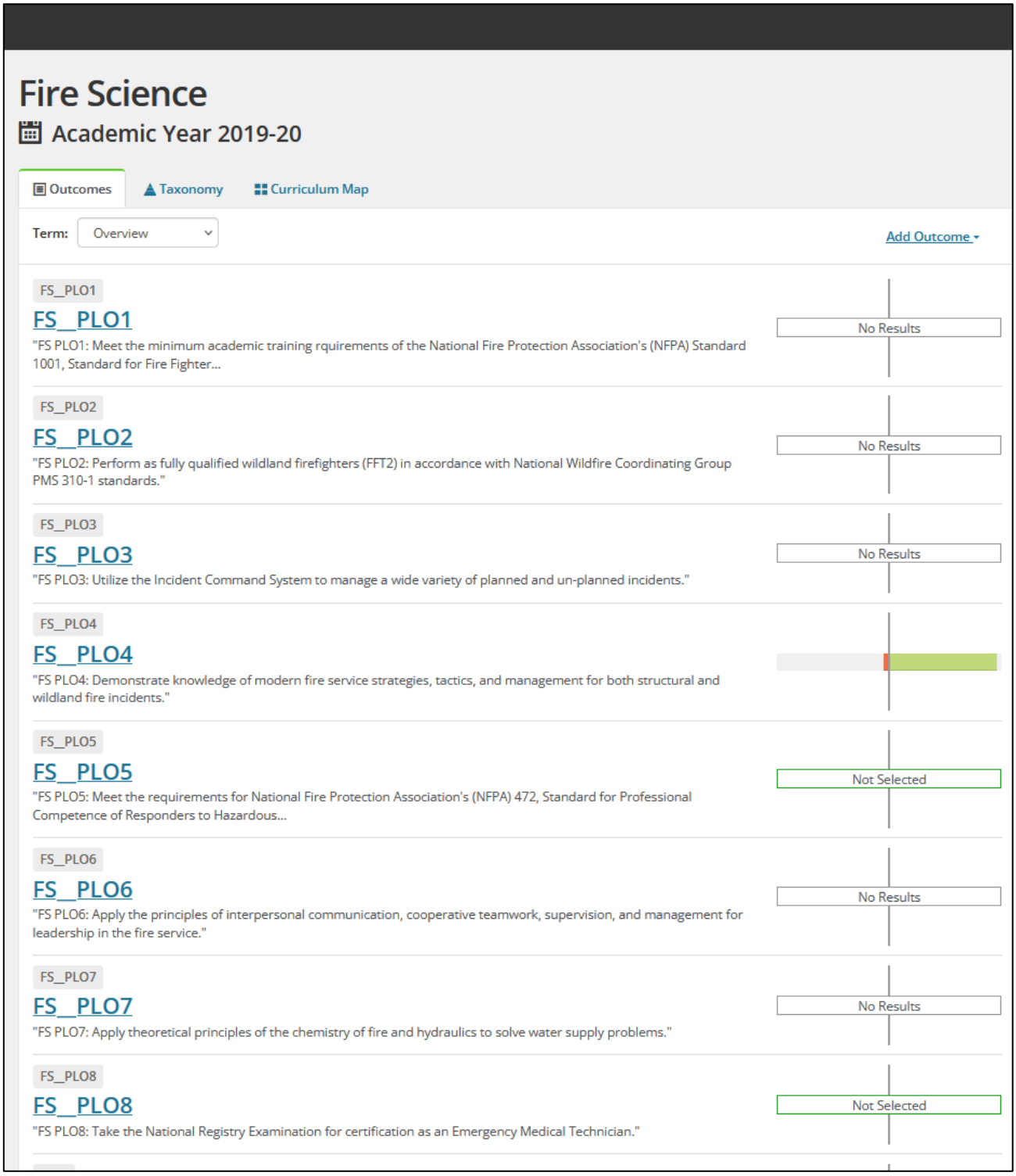
Dark Green = Exceeds // Light Green = Meets // Orange = Partly Meets //Red = Does not Meet



Program or Unit Name: **Fire Science**

AY19-20 PLO Assessment Results

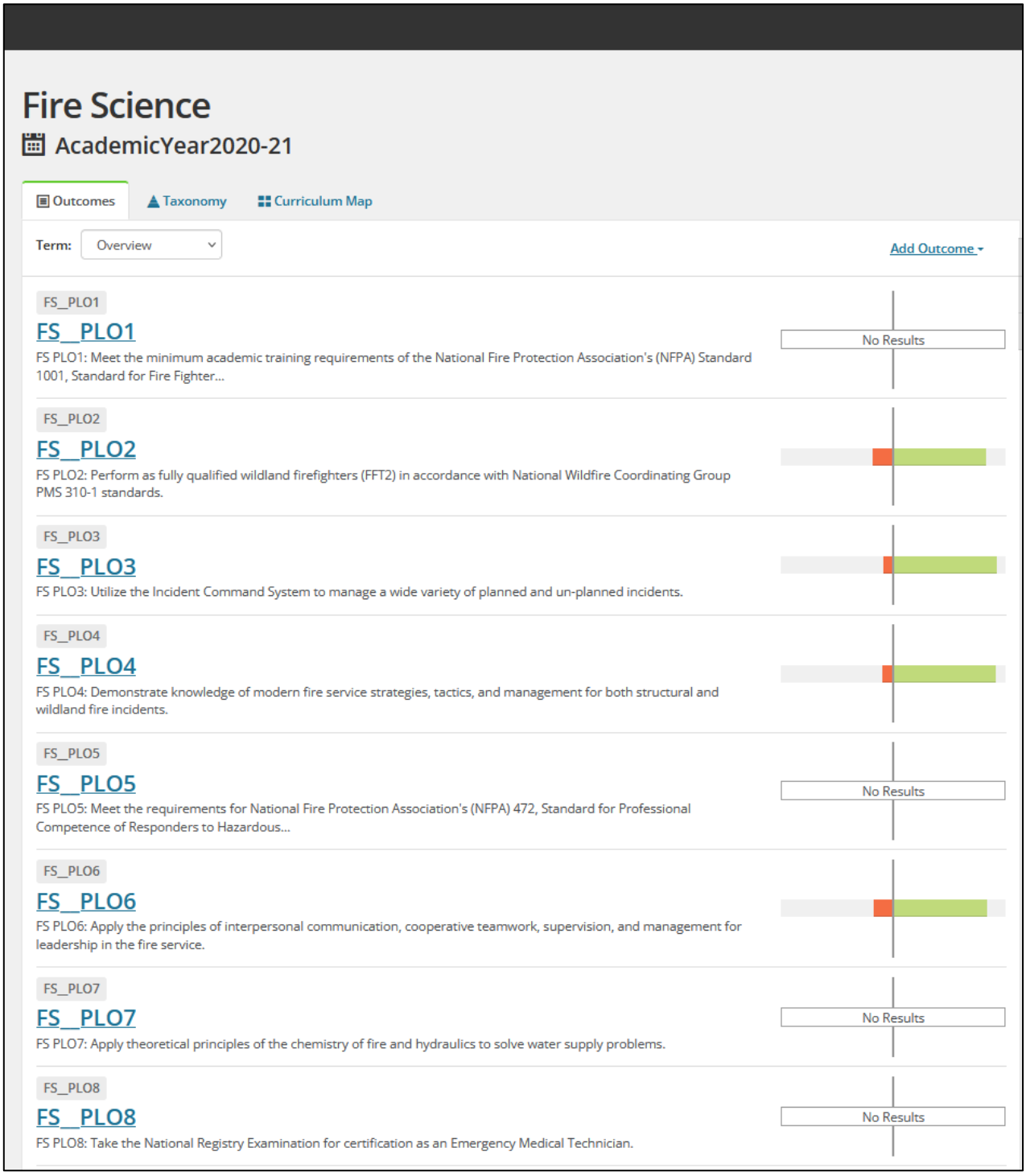
Dark Green = Exceeds // Light Green = Meets // Orange = Partly Meets //Red = Does not Meet



Program or Unit Name: **Fire Science**

AY20-21 PLO Assessment Results

Dark Green = Exceeds // Light Green = Meets // Orange = Partly Meets //Red = Does not Meet



d) Changes that have been made as a result of the assessment results:

As a result of Assessment Results there has been a change in Instructional format. It was determined that if key educational points were repeated numerous times, the students were able to comprehend those points. Due to COVID several face-to-face courses were converted to Distance Education. Students respond 2 to 1 that they preferred distance learning. Course Evaluation Survey (CES) comments included it was easy to go from work to their home, they did not have to find childcare, the course sessions were recorded and placed in Laulima which allowed students who missed class to review the material at a later date. A few preferred face-to-face because the home environment was not conducive to learning.

4. Action Plan

This action plan should be detailed enough to guide your program/unit through to the next program/unit Comprehensive Review cycle. Include specific recommendations for improvement(s) or planned program or unit action(s). The plan must include details of measurable outcomes, benchmarks and timelines.
Specify how the action plan aligns with the College's Mission and Strategic Plan. Include a discussion of how implementing this action plan will contribute to the College achieving the goals of the Strategic Plan.
https://hawaii.hawaii.edu/sites/default/files/assets/docs/strategic-plan/hawcc-strategic-directions-2015-2021.pdf
Be sure to list resources that will be required, if any, in section 5 below.
**The action plan may be amended based on new initiatives, updated data, or unforeseen external factors between now and the next Comprehensive Review.*

Although the Fire Science program is a Healthy program, I plan to continue this successful path by the following:

- Provide students with the educational requirements by the State of Hawai`i for Emergency Medical Technician Licensure.
  Timeline: Fall 2022
- Increase enrollment in the Pālamanui campus 10% by informing the Kona side communities of the availability of the Fire Science program at Pālamanui.
  Timeline: Continuous
- Address the issue of identified classroom space for Fire Science and EMT classes on the Manono Campus, and provide storage space at the Pālamanui Campus for fire equipment.
  Supplies are currently stored at the Kona Airport Fire Station and the Hualalai Fire

Brigade Station (near the Pālamanui Campus). A Matson Container would resolve this issue.
Timeline: Fall 2022

- Increase Successful Completion to 95%.
  Timeline: Spring 2023
- Disposition of Fire Engine.
  Timeline: Fall 2022

On December 5, 2019, the CERC submitted a memo regarding the Fire Science Comprehensive Program Review AY 2016 through AY 2018

The following Action Plan recommendations were:

- Need to institutionalize EMT at HawCC.
  This issue that has not been met. **The above-mentioned issue has an impact on the students' employment opportunities. This Action Plan aligns with HGI Strategy #3.**
- Need to secure a covered parking to protect fire engine from the elements.
  This issue has not been met. Having an operational engine provides students with hands-on experience that enhances their learning of hydraulics. This Action Plan aligns with HGI Strategy # 3.
- Need to identify classroom space at the Manono Campus and storage space for Fire Science equipment at the Pālamanui Campus.
  This issue has not been met. This Action Plan aligns with HGI Strategy # 4.
- Promote the need for a Bachelor of Science in Fire and Emergency Management Administration degree.
  There is a signed Articulation Agreement with Eastern Oregon University that allows our students the opportunity to obtain a BS in Fire Administration through distance learning. This Action Plan aligns with HGI Strategy #2.

I will need the support of the College Administration to address the not met issues. The above not met issues are carried over to the current action plan.

HGI Action Strategy 2:

Implement structural improvements that promote persistence to attain a degree and timely completion. Tactics • Establish pathways for all degree programs, including transfer pathways from

the community colleges. • Strengthen developmental education initiatives that increase preparation, improve placement methods, and reduce time spent in developmental education. • Utilize Summer Term to promote college readiness and degree completion. • Reduce gaps in college completion for Native Hawaiians and low-income and under-represented groups. • Transition from a course-based to a curriculum-pathway-based registration system. • Schedule courses to facilitate timely degree completion. 4 • Strengthen and align financial aid resources, policies, and practices for increased access and completion. • Improve and stabilize student support services, especially for priority targets: Native Hawaiians, Filipinos, Pacific Islanders, Veterans, Adult Learners, and Part-Time Students. • Strengthen and align assessment, program/unit review, data collection, and data analyses processes to support improved teaching and learning, accreditation, and governance and planning. • Provide enhanced professional development to improve teaching and learning. • Support the permanent status and expansion of the Associate of Arts in Hawaiian Studies and Associate of Science, Natural Science degrees. • Continue to embed Hawaiian practices throughout the college. • Develop plan to normalize Hawaiian language throughout the college. • Develop plan to provide liberal arts and Hawaiian studies degrees utilizing Hawaiian language immersion. • Provide funding for permanent hire of grant-funded personnel.

HGI Action Strategy 3:

Anticipate and align curricula with community and workforce needs. Tactics • Utilize current State and Hawai‘i Island information about workforce, employment, and salaries from the Department of Labor and Industrial Relations, Economic Modeling Specialist International, and other sources. • Follow up with graduates and employers regarding Hawai‘i CC students’ preparation for the workforce and community. • Engage systematically with community-based groups to inform program offerings and curricula. • Develop new programs that are responsive to Hawai‘i Island’s community needs. • Seek Employer and industry input throughout the Hawai‘i Island community to anticipate and align community and workforce needs through non-credit training. • Explore non-credit to credit pathways. • Develop hiring policies that encourage the hiring of qualified Native Hawaiian and Hawai‘i Island-resident faculty and staff. • Develop minimum and desirable qualifications for all positions that request that the applicant demonstrate an understanding of Hawai‘i Island communities and diverse cultures, particularly Native Hawaiians. • Provide learning opportunities for faculty and staff to learn Hawaiian language and culture. 5 • Develop more robust orientation for new employees, including Hawaiian language and culture. • Develop weekend and evening programs for working adults to continue and complete a college degree.

HGI Action Strategy 4:

Solidify the foundations for Hawai‘i CC at Pālamanui, our newest campus, and establish large-scale student support services for Native Hawaiians, low income students, and the under-represented

populations served. Tactics • Secure UH Foundation position to coordinate advancement efforts for Hawai‘i CC and Hawai‘i CC Pālamanui. • Create capital development plans for facilities that support expected enrollment growth and campus academic and strategic plans. • Develop academic programs that meet the needs of the West Hawai‘i community. • Increase the baccalaureate and advanced degree offerings at UH West Hawai‘i Center to complement Hawai‘i CC programs and meet the needs of the West Hawai‘i community as a gateway to the other University of Hawai‘i institutions. • Develop financial and operational plans that support the expected rapid increases in enrollment as the Pālamanui community embraces its new campus. • Increase the capacity of the Hawaiian Studies program to provide courses for the AA-HWST degree at Pālamanui, online and through the early-college program.

5. Resource Implications -
* ONE-TIME BUDGET REQUESTS ONLY *

Detail any ONE-TIME resource requests that are not included in your regular program or unit operating "B" budget, including reallocation of existing resources (physical, human, financial).

*Note that CTE programs seeking future funding via UHCC System Perkins proposals must reference their ARPD Section 4. Action Plan and this ARPD Section 5. Resource Implications to be eligible for funding.

☐ **I am NOT requesting additional ONE-TIME resources for my program/unit.**

XX **I AM requesting additional ONE-TIME resource(s) for my program/unit.**

Total number of items being requested: ___1_____(4 items max.)

*For each item requested, make sure you have gathered the following required information and all relevant documentation before you upload this Review; you will submit all information and attachments for your **Resource Request** as part of your Review document submission via the Hawaii CC - Program and Unit Review Submission portal https://hawaii.kualibuild.com/app/builder/#/app/60ef56c477b0f470999bb6e5/run

- ✓ Item Description
- ✓ Justification
- ✓ Priority Criteria (must meet at least one of the following):

1. Ensure compliance with mandates and requirements such as laws and regulations, executive orders, board mandates, agreements and contracts and accreditation requirements.

2. Address and/or mitigate issues of liability, including ensuring the health, safety and security of our Kauhale.
3. Expand our commitment to serving all segments of our Hawaii Island community through Pālamanui and satellite centers
4. Address aging infrastructure.
5. Continue efforts to promote integrated student support in closing educational gaps.
6. Leverage resources, investments with returns, or scaling opportunities
7. Promote professional development.

Category-Specific Information				
Equipment	Estimated Date Needed	Quantity / Number of Units; Cost per Unit	Total Cost (with S&H, tax)	On Inventory List (Y/N); Decal #, Reason replacing
Facilities Modification	Estimated Date Needed	Total Cost	Monthly/Yearly Recurring Costs	Utilities Required
Personnel Resource	Estimated Date Needed	FTE; Position Type; Position Title	Estimated Salary	Was an Existing Position Abolished? (Y/N); Position #
Professional Development	Estimated Date Needed	Have you applied before (Y/N); was it approved?	Professional Development Type	PD Details; Impact; Total Cost
Reallocation	Estimated Date Needed	Total Cost	Monthly/Yearly Recurring Costs	Reallocation Proposal

6. Optional: Edits to Occupation List for Instructional Programs

Review the Standard Occupational Classification (SOC) codes listed for your Instructional Program and verify that the occupations listed align with the program learning outcomes. Program graduates should be prepared to enter the occupations listed upon program completion. Indicate in this section if the program is requesting removal or additions to the occupation list.

☐ **I am NOT requesting changes to the SOC codes/occupations listed for my program.**

x I am requesting changes to the SOC codes/occupations listed for my program.

O*Net CIP-SOC Code Look-up

in the **Crosswalks box, choose "Education," then enter CIP number to see related SOC codes*

Program or Unit Name: **Fire Science**

Fire Science program

Proposed Changes

Delete:

33-2021 Fire Inspectors and Investigators. T***hese are not entry level positions. These positions are filled internally through the promotion system.***

33-2022 Forest Fire Inspectors and Prevention Specialist, T***hese are not entry level positions. These positions are filled internally through the promotion system.***

Add:

CIP 43.0203 Fire Science/Fire-Fighting

CIP 43.0206 Wildland Forest Firefighting and Investigation.

SOC 33-2011, Firefighters

These are entry level positions our students would qualify for.

**All requested changes to the SOC codes/occupations listed for programs must be discussed with and approved by the Department/Division Chair.*