1. Program or Unit Mission

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 an accredited 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. Program Student Learning Outcomes or Unit/Service Outcomes

Unfortunately for AY 21-22 the Fire Program was unable to conduct any assessments. Due to the workload of a single faculty Program Coordinator, I had other business that needed to be done for the program. I will continue to work with the Assessment Coordinator to get the program back on track with assessments.

3. Analysis of the Program/Unit


Demand:

The population of the Island of Hawai‘i continues to grow and age. The demand for firefighters and emergency medical services by the federal, state and local fire service agencies remains high for student employment. There is also an increase in employment opportunities in the private sector who provides fire protection systems such as sprinklers for business.
Efficiency:

- I am the only BOR faculty member who teaches and serves as the Fire Science Program Coordinator. I administer the program by supervising 9 Lecturers on the Manono and Palamanui Campuses.
- There has been a slight decline in class size. There is also a slight decline in the number of majors due to a healthy economy and low unemployment rate.
- The number of low enrollment classes are on the Palamanui Campus. We are taking a proactive approach by attending numerous high school career fairs and informing the community of the Fire Science program on the Kona side.

Effectiveness:

- The Successful Completion rate continues to increase to 91%.
- The number of degrees awarded is 30. The Fire Science program consistently accounts for approx. 20% of all AS degrees awarded by the college.
- We had 2 students transfer to UH 4-yr. programs.

Distance Indicators:

- The number and enrollment in DE classes have declined due to more classes being taught face-to-face. However, some students do prefer the DE classes.
- Persistence remains high at 86%

Perkins Indicators:

- All Perkins Indicators were met.

Performance Indicators:

- The number of degrees and certificates remains high at 30.
- A little over 50% (17) of degrees and certificates are awarded to Native Hawaiians.
- We had 16 students who are Pell Recipients.
- 2 students transferred to a UH 4-yr. program.

4. Action Plan

The following is from the Comprehensive Report of AY18-19 to AY20-21.

- Provide students with the educational requirements by the State of Hawai`i for Emergency Medical Technician Licensure.
Timeline: Fall 2022
Results: The State Legislature in 2021 passed legislation identifying 4 levels of EMT Licensure in the State of Hawai’i. We now provide the educational requirements for our students to obtain Licensure as an EMT Non-Transport.

- Increase enrollment in the Palamanui campus by 10% by informing the Kona side communities of the availability of the Fire Science program at Palamanui.
  
  Timeline: Continuous
  
  Results: We are continually promoting the Fire Science program at the Palamanui Campus by attending numerous high school career day events.

- Address the issue of identified classroom space for Fire Science and EMT classes on the Manono Campus and provide storage space at the Palamanui Campus for fire equipment.
  
  Supplies are currently stored at the Kona Airport Fire Station and the Hualalai Fire Brigade Station (near the Palamanui Campus). A Matson Container would resolve this issue.
  
  Timeline: Fall 2022
  
  Results: Although unofficial the FS program has been using classroom 139 and 215 in Bldg. 383 consistently. We now have a designated storage space for our EMT equipment at the Palamanui Campus. There is no longer any equipment at Kona Airport. We continue to store equipment at Hualalai Fire Brigade Station because it is advantageous to have the equipment there.

- Increase Successful Completion to 95%.
  
  Timeline: Spring 2023
  
  Results: Our current Successful Completion rate is 91%. We will continually work on improving.

- Disposition of Fire Engine.
  
  Timeline: Fall 2022
  
  Results: We are currently in the process of removing the Fire Engine.

Proposed Action Plan:

The Fire Science program is currently in a good position with high enrollment, high graduation and students finding employment opportunities. The Lahaina Fire has brought recognition to our program by the national media such as The Washington Post contacting us for information. However, the following would improve the overall program.

- With the support of the administration, have HawCC be allowed to teach Emergency Medical Technician-Advanced Life Support (ALS) which is 38 hrs. and 1.3 credits. This would allow our students to apply for Licensure as an EMT-Transport.
- I plan to pursue the possibility of establishing an Internship Program with the Hawai’i Fire Dept.

All action items align with the College's Mission and support "workforce readiness."
MISSION: To promote lifelong learning, Hawai‘i Community College will emphasize the knowledge and experience necessary for Kauhale members to pursue academic achievement and workforce readiness. Aligned with the mission of the UH Community Colleges, we are committed to serving all segments of our Hawai‘i Island community.

5. Resource Implications
Special Resource Requests **not included in operating “B” budget** *

☐ I am NOT requesting additional resources for my program/unit.
☒ I AM requesting additional resource(s) for my program/unit.
Total number of items being requested: ______4____(4 items max.)

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Vendor</th>
<th>Cost per Unit</th>
<th>How Many Units</th>
<th>Shipping Costs</th>
<th>Type of Purchase</th>
<th>Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xerox C8155H2</td>
<td>Xerox Solutions Corporation</td>
<td>$208.77 + $9.84 per month</td>
<td>60 months</td>
<td>NA</td>
<td>Lease</td>
<td>$13,116.60</td>
</tr>
</tbody>
</table>

**Justification:**
The copier is required to generate documents for the Fire Science and Nursing Programs and training material that meets national standards and allow students to become proficient with taking various Fire Science and Nursing courses.

**Priority Criteria:**
The above items meet the following criteria:
- Ensure compliance with mandates and requirements such as laws and regulations, executive orders, board mandates, agreements and contracts and accreditation requirements.
- Expand our commitment to serving all segments of our Hawaii Island community through Pālamanui and satellite centers.
- Promote professional development.

**Item # 2 Equipment Description:**
Assorted Emergency Medical Technician equipment on a recurring basis.
2023 Hawai'i Community College ARPD
Program: Fire Science

Estimated Date Needed: Fall 2024 semester.
On Inventory: No

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Vendor</th>
<th>Cost per Unit</th>
<th>How many units</th>
<th>Shipping Cost</th>
<th>Type of Purchase</th>
<th>Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMI NK-330-6 Stethoscope and Aneroid Blood Pressure Set</td>
<td>ScrubSmart</td>
<td>$34.99 + $15.74 tax</td>
<td>20</td>
<td>Free Shipping</td>
<td>Recurring</td>
<td>$1014.60</td>
</tr>
<tr>
<td>Heartcode BLS Online Course</td>
<td>American Heart Association</td>
<td>$34.00</td>
<td>20</td>
<td>No Shipping</td>
<td>Recurring</td>
<td>$680.00</td>
</tr>
</tbody>
</table>

**Justification:**
The above items are required to meet national standards and allow students a hands-on experience to become proficient with taking respiratory and blood pressure readings.

**Priority Criteria:**
The above items meet the following criteria:
- Ensure compliance with mandates and requirements such as laws and regulations, executive orders, board mandates, agreements and contracts and accreditation requirements.
- Expand our commitment to serving all segments of our Hawaii Island community through Pālamanui and satellite centers.
- Promote professional development.

**Item # 3 Equipment Description:**
Assorted Emergency Medical Technician equipment on a One-time basis.
Estimated Date Needed; Fall 2024 semester.
On Inventory: No

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Vendor</th>
<th>Cost per Unit</th>
<th>How Many</th>
<th>Shipping Costs</th>
<th>Type of Purchase</th>
<th>Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simulaids Rescue Manikin</td>
<td>AED Superstore</td>
<td>$1,775.95 + tax = $1,855.86</td>
<td>2</td>
<td>Free Shipping</td>
<td>One-Time</td>
<td>$3711.72</td>
</tr>
<tr>
<td>Emergency Traction Splint</td>
<td>Emergency Medical Products</td>
<td>$739.99 + $37.80 tax = $877.79</td>
<td>2</td>
<td>$100.00</td>
<td>One-Time</td>
<td>$1855.58</td>
</tr>
</tbody>
</table>

**Justification:**
The above items are required to meet national standards and allow students hands-on experience to become proficient with emergency rescue techniques.

**Priority Criteria:**
The above items meet the following criteria:
- Ensure compliance with mandates and requirements such as laws and regulations, executive orders, board mandates, agreements and contracts and accreditation requirements.
- Expand our commitment to serving all segments of our Hawaii Island community through Pālamanui and satellite centers.
- Promote professional development.

**Item # 4 Equipment Description:**
Assorted structural fire equipment on a One-time basis.
Estimated Date Needed; Fall 2024 semester.
On Inventory: No

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Vendor</th>
<th>Cost per Unit</th>
<th>How Many</th>
<th>Shipping Costs</th>
<th>Type of Purchase</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Hook</td>
<td>The FireStore</td>
<td>$140.59</td>
<td>1</td>
<td></td>
<td>One-Time</td>
<td>$140.59</td>
</tr>
<tr>
<td>Fire Hooks Arson-Trash Hook</td>
<td>The FireStore</td>
<td>$145.59</td>
<td>1</td>
<td></td>
<td>One-Time</td>
<td>$145.59</td>
</tr>
<tr>
<td>Tactical Oval Carabiner</td>
<td>The FireStore</td>
<td>$9.39</td>
<td>12</td>
<td></td>
<td>On-Time</td>
<td>$112.68</td>
</tr>
<tr>
<td>Roof Hook</td>
<td>The FireStore</td>
<td>$121.59</td>
<td>1</td>
<td></td>
<td>One-Time</td>
<td>$121.59</td>
</tr>
<tr>
<td>Avon Rope Bag</td>
<td>The FireStore</td>
<td>$18.99</td>
<td>1</td>
<td></td>
<td>One-Time</td>
<td>$18.99</td>
</tr>
<tr>
<td>11 mm Static Rescue Rope</td>
<td>The FireStore</td>
<td>$229.99</td>
<td>100 ft.</td>
<td></td>
<td>One-Time</td>
<td>$229.99</td>
</tr>
<tr>
<td>Rope Rescue Truck Cache Kit</td>
<td>The FireStore</td>
<td>$2792.20</td>
<td>1</td>
<td></td>
<td>One-Time</td>
<td>$2792.20</td>
</tr>
</tbody>
</table>

Total cost for items=$3561.63
Shipping $15.00 the entire order.
Tax+ $185.95
Total=$3762.58
Justification:
The above items are required to meet national standards and allow students hands-on experience to become proficient with structural fire rescue equipment.

Priority Criteria:
The above items meet the following criteria:

- Ensure compliance with mandates and requirements such as laws and regulations, executive orders, board mandates, agreements and contracts and accreditation requirements.
- Expand our commitment to serving all segments of our Hawaii Island community through Pālamanui and satellite centers.
- Promote professional development.