

HAWAI`I COMMUNITY COLLEGE
ANNUAL
INSTRUCTIONAL PROGRAM REVIEW
TEMPLATE

Fire Science

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July 1, 2012 to June 30, 2013

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Program/Unit Review at Hawai'i Community College is a shared governance responsibility related to strategic planning and quality assurance. It is an important planning tool for the college budget process. Achievement of Program/Unit Outcomes is embedded in this ongoing systematic assessment. Reviewed by a college-wide process, the Program/Unit Reviews are available to the college and community at large to enhance communication and public accountability.

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CERC Comments and Feedback (If you submitted a Comprehensive Program Review in 2011 or 2012, please complete this section)

CERC gave recommendations intended as suggestions for improvement. Provide a brief response to the suggestions made. i.e. Were suggestion(s) valid? Were change(s) made as a result of the suggestion(s)?

Program Description (Use the official description from catalog then give more in depth explanation of what the program does, who it serves and generally describe it's accomplishments)

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, 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 Colorado State 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.

Part I: Quantitative Indicators

NO ENTRY

Part II: Analysis of the Program

Alignment with College Mission and ILOs

Write a brief narrative describing the program and how it supports the College's mission and Institutional Learning Outcomes (ILOs).

College's mission:

Hawai'i Community College (Hawai'iCC) promotes student learning by embracing our unique Hawai'i Island culture and inspiring growth in the spirit of "E`Imi Pono." Aligned with the UH Community Colleges system's mission, we are committed to serving all segments of our Hawai'i Island community.

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Program Mission:

The Fire Science program promotes learning to provide the various fire service agencies on the Island of Hawai'i with a pool of well educated and qualified applicants.

Describe how this program supports the College's mission.

The Fire Science program provides students with the education to increase their employment opportunities with the various agencies in the fire service.

Describe how this program supports the College's Institutional Learning Outcomes below.

ILO 1: Our graduates will be able to communicate effectively in a variety of situations.

Describe how the Program supports ILO1:

The Fire Science program promotes effective communication between individuals and groups. We provide the opportunities to develop communications using a variety of communication methods.

ILO 2: Our graduates will be able to gather, evaluate and analyze ideas and information to use in overcoming challenges, solving problems and making decisions.

Describe how this Program supports ILO 2:

There is no book on how to fight fires. Everytime a firefighter responds to an incident the firefighter has to gather information, make a decision, evaluate the effectiveness of the decision and decide whether to proceed or modify the decisions made.

ILO 3: Our graduates will develop the knowledge, skills and values to make contributions to our community in a manner that respects diversity and Hawaiian culture.

Describe how this Program supports ILO 3:

The Fire Science program prepares individuals to serve as first responders to a variety of emergency incidents. First responders are essential to preserving life and property during times of emergencies.

Annual Report of Program Data (ARPD)

Based on the data from this Program's ARPD, analyze this program's strengths and weaknesses in terms of demand, efficiency, and effectiveness.

Overall Health-- Healthy

Demand -- Healthy

The demand for firefighters continue to grow. Due to the economy improving, some agencies are hiring, while federal agencies are restrictive due to budget restraints. The number of students enrolling in the Fire Science has seemed to level off at around 45 new students every fall semester.

Efficiency -- Healthy

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The Fire Science program continues to generate income for the college. Program year 11-12 tuition and fees were \$16,704 and 12-13 were \$29,320.

Effectiveness -- Healthy

Successful completion of students increased in Program Year 11-12, from 82% to PY 12-13, 87%.

Distance Education: Completely On-Line Classes

If applicable, based on the data on Distance Education (DE) from this Program's ARPD, analyze this program's strengths and weaknesses in terms of its DE offerings. Include future plans (i.e. will increase/decrease offerings; CARP 100 was not effective online, will try CARP 101 instead; increase professional development for faculty).

NA

Perkins IV Core Indicators

If applicable, provide an analysis for any Perkin's Core Indicator for which this program did not meet the goal.

NA

Performance Funding

Briefly describe initiatives/strategies that this program has or will implement to increase any or all of the Performance Funding outcomes.

NA

Previous Program Actions

From the Academic Master Plan (AMP), list the Program Actions for this program. Give a progress report for each Program Action, describe the degree of achievement. Indicate "Delete" if this Program Action will no longer be a priority Program Action

Program Actions	Progress Evaluation
Establish Fire 293, this would be an Internship Course with the Hawai'i Fire Department. This course would be available to seniors about to graduate.	I believe I have resolved the liability issues, and plan to continue the establishment of this course.
Establish a Bachelor of Science in Fire and Emergency Services Degree program at UHH or HawCC.	The UHH gave a very positive response to my proposal. However, due to budget constraints they wanted to put this on hold for the moment.
Establish STEP with USFS Region 5.	Plan to continue with this. However, CALFIRE and HawCC have established a seasonal employment opportunity for our

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	students.

Significant Program Actions for 2012-2013. (include curriculum changes, new certificates, stopout, gain/loss of positions)

1. NURS 110 Medical Terminology was added to the curriculum to prepare students for EMT classes.
2.
3.

Analysis of Strengths and Weaknesses

Briefly describe this program's top 3 strengths and 3 weaknesses. Provide an explanation and supporting evidence for each strength and weakness (e.g. assessment results, data elements from ARPD, surveys, etc.)

Strengths	Using supporting evidence, describe why this is a strength
S1. Enrollment has stabilized	Fall enrollment of new students is between 45-50
S2. US Forest Service	Continue to recruit students for employment
S3. Cal-Fire	Accepting applications for employment

Weaknesses	Using supporting evidence, describe why this is a Weakness
W1. Classroom space	Each semester we continue to search for class space.
W2.	
W3.	

Trends and Other Factors

Describe trends including comparisons to any applicable standards, such as college, program, or national standards from accrediting associations, etc. Include, if relevant, a summary of Satisfaction Survey Results, special studies and/or instruments used, e.g., CCSSE, etc. Describe any external factors affecting this program or additional program changes not included elsewhere.

There is no plan to make major changes to the Fire Science program. However, the program is continually evaluated, and minor changes to improve the program will continue as needed.
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Part III: Action Plan

Goals and Planning

List additional Program Action(s), not included in the AMP to be implemented for program success. Identify the AMP Priorities, College's ILOs, Strategic Plan Action Strategies, and UH System collaboration (if applicable) to which these Program Action(s) align.

Program Action 1		ILO Alignment (select up to 3)	Strategic Plan Alignment (select best alignment; max 3)		UH System Collaboration
			Performance Measure	Action Strategy	
NA	Graduation	ILO 1	A1.1	New Strategy	
	Graduation	ILO 2	A1.1	New Strategy	
	Graduation	ILO 3	A1.1	New Strategy	

[Link to Hawaii Community College Institutional Learning Outcomes](#)

[Link to Hawai'i Community College Strategic Plan](#)

[Link to Hawaii Community College Academic Master Plan](#)

Narrative of New Strategy for Strategic Plan:

1.
2.
3.

Briefly explain how **Program Action 1** aligns to the College's AMP Priorities, ILOs, Strategic Plan, and UH System collaboration (if applicable):

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Calendar of planned activities for **Program Action 1** – In chronological order, briefly describe the procedures/activities planned to achieve **Program Action 1**

Activity(ies)	When will the activity take place
Example: Nursery design development Shade replacement Irrigation design and installation	September 2014 Fall 2014 Spring 2015

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Program Action 2		ILO Alignment (select up to 3)	Strategic Plan Alignment (select best alignment; max 3)		UH System Collaboration
			Performance Measure	Action Strategy	
	Graduation	ILO 1	A1.1	New Strategy	
	Graduation	ILO 1	A1.1	New Strategy	
	Graduation	ILO 1	A1.1	New Strategy	

Narrative of New Action Strategy for Strategic Plan:

1.
2.
3.

Briefly explain how **Program Action 2** aligns to the College's AMP Priorities, ILOs, Strategic Plan, and UH System collaboration (if applicable):

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Calendar of planned activities for **Program Action 2** – In chronological order, briefly describe the procedures/activities planned to achieve **Program Action 2**

Activity	When will the activity take place

Program Action 3		ILO Alignment (select up to 3)	Strategic Plan Alignment (select best alignment; max 3)		UH System Collaboration
			Performance Measure	Action Strategy	
	Graduation	ILO 1	A1.1	New Strategy	
	Graduation	ILO 1	A1.1	New Strategy	
	Graduation	ILO 1	A1.1	New Strategy	

Narrative of New Strategy for Strategic Plan:

1.
2.
3.

Briefly explain how **Program Action 3** aligns to the College's AMP Priorities, ILOs, Strategic Plan, and UH System collaboration (if applicable):

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Calendar of planned activities for **Program Action 3** – In chronological order, briefly describe the procedures/activities planned to achieve **Program Action 3**

Activity	When will the activity take place

List specific action plans for any Perkin's Core Indicator for which this program did not meet the goal.

Perkin's Indicator	Action Plans	When will the activity take place
1P1		

Part IV: Resource Implications

List Top 3 Cost Items needed for program success. Identify alignment to the AMP Program Actions, Strategic Plan Action Strategies and/or Strengths and/or Weaknesses to address.

Cost Item 1	Type	Cost	Strategic Plan Alignment (select best alignment; max 3)		Academic Master Plan Alignment (select best alignment; max 3)	Strength	Weakness
				Action Strategy	Program Action from AMP (ie 4.3) or write "New Strategy"	From Part II above	From Part II above
A variety of low cost equipment to help with classroom instruction.	Equipmen	\$1,000	A1.1	New Strategy	New Strategy	S1	None
			None	None		None	None
			None	None		None	None

[Link to Hawaii Community College Institutional Learning Outcomes](#)

[Link to Hawai'i Community College Strategic Plan](#)

[Link to Hawaii Community College Academic Master Plan](#)

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Briefly explain why **Cost Item 1** is necessary to meet priorities of program and/or to address strengths and/or weaknesses.

As the program progresses there are a variety visual aids that can help instructors with student learning.

Cost Item 2	Type	Cost	Strategic Plan Alignment (select best alignment; max 3)		Academic Master Plan Alignment (select best alignment; max 3)	Strength	Weakness
				Action Strategy	Program Action from AMP (ie 4.3) or write "New Strategy"		
	Equipmen		A1.1	New Strategy		S1	W1
		A1.1	New Strategy		S1	W1	
		A1.1	New Strategy		S1	W1	

Briefly explain why **Cost Item 2** is necessary to meet priorities of program and/or to address strengths and/or weaknesses.

Cost Item 3	Type	Cost	Strategic Plan Alignment (select best alignment; max 3)		Academic Master Plan Alignment (select best alignment; max 3)	Strength	Weakness
				Action Strategy	Program Action from AMP (ie 4.3) or write "New Strategy"		
	Equipmen		A1.1	New Strategy		S1	W1
		A1.1	New Strategy		S1	W1	
		A1.1	New Strategy		S1	W1	

Briefly explain why **Cost Item 3** is necessary to meet priorities of program and/or to address strengths and/or weaknesses.

Part V: Program Student Learning Outcomes

List the Program Learning Outcomes and check mark those assessed for the 2012-2013 program year.

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	Check mark if Assessed this year	Program Student Learning Outcomes
1	<input type="checkbox"/>	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)
2	<input type="checkbox"/>	Perform as a fully qualified wildland firefighter (FFT2) in accordance with National Wildfire Coordinating Group PMS 310-1 standards.
3	<input type="checkbox"/>	Utilize the Incident Command System to manage a wide variety of planned and unplanned incidents.
4	<input type="checkbox"/>	Demonstrate knowledge of modern fire service strategies, tactics, and management for both structural and wildland fire incidents.
5	<input checked="" type="checkbox"/>	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.
6	<input type="checkbox"/>	Apply the principles of interpersonal communication, cooperative teamwork, supervision, and management for leadership in the fire service.
7	<input type="checkbox"/>	Apply the theoretical principles of the chemistry of fire and hydraulics to solve water supply problems.
8	<input type="checkbox"/>	
9	<input type="checkbox"/>	
10	<input type="checkbox"/>	

A) Evidence of Industry Validation for CTE Programs – Provide documentation that the program has submitted evidence and achieved certification or accreditation from an organization granting certification in an industry or profession. If the program/degree/certificate does not have a certifying body, the recommendations for, approval of, and/or participation in, assessment by the program’s advisory council can be submitted. – Describe the documentation; i.e. 9/27/2013 Minutes of ACC Advisory Council; Completed Rubrics by Advisory Council Members.

The National Fire Protection Association (NFPA) is a non-profit organization that establishes training and certification levels at the national level. For Hazardous Materials Incidents the NFPA established minimum training and education levels to qualify at the Operations Level.

B) Expected Level of Achievement – Describe the different levels of achievement for each characteristic of the learning outcome(s) that were assessed. What represented “excellent,” “good,” “fair,” or “poor” performance using a defined rubric and what percentages were set as goals for student success; i.e. 85% of students will achieve good or excellent in the assessed activity.”

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Students were graded as following:

- A 90%>
- B 80%>
- C 70%>
- D 60%>
- F <50%

C) List Course(s) Assessed – List the courses assessed during the reporting period.

Fire 207 - Hazardous Materials Awareness/Operations

D) Assessment Strategy/Instrument – Describe what, why, where, when, and from whom assessment artifacts were collected.

The Final Exam covered all material taught during the semester.

E) Results of Program Assessment – The % of students who met the outcome(s) and at what level they met the outcome(s).

A total of 14 students took the Final Exam.

Results:

2 students received, A (90%>)

10 students received, B (80%>)

2 students received, C (70%>)

No students failed the course.

100% of students succeeded and met PLO outcome.

F) Other Comments – Include any information that will clarify the assessment process report.

G) Next Steps – Describe what the program will do to improve the results. “Next Steps” can include revision to syllabi, curriculum, teaching methods, student support, and other options.

No change in program since 100% of students met PLO outcome.