

**UHCC December 2009 Coversheet –
Annual Report Program Data**

College: Hawaii Community College

Program: Fire Science

Assessment Period: Summer 2008 – Spring 2009

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Check All Credentials Offered	AA	AS	ATS	AAS	CA	CC	COM	ASC	APC
		X			X				

Introduction: Brief description of the program and program 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, Crash and Rescue, 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.

Program Learning Outcomes:

Upon successful completion, students are prepared to:

- 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).
- Perform as a fully qualified wildland firefighter (FFT2) in accordance with National Wildfire Coordinating Group (NWCG) PMS 310-1 standards.
- Utilize the Incident Command System to manage a wide variety of planned and un-planned incidents.
- Demonstrate knowledge of modern fire service strategies, tactics, and management for both structural and wildland fire incidents.
- Identify hazardous materials, hazardous properties, and successful emergency scene operations.
- Apply the principles of interpersonal communication, cooperative teamwork, supervision, and management for leadership in the fire service.
- Apply the theoretical principles of the chemistry of fire and hydraulics to solve water supply problems.

Part I.
Quantitative Indicators (Reported on 2009 Summary Report Program Data excel sheet --includes health calls based on system scoring rubric).

Annual Report of Program Data for Fire and Emergency Response
Hawaii Community College Program Major(s): None

Overall Program Health					Unhealthy
Demand Indicators					Demand Health Unhealthy
		Academic Year			
		Fall 06	Fall 07	08-09	
1	New & Replacement Positions (State)	n/a	n/a	0	
2	New & Replacement Positions (County Prorated)	n/a	n/a	0	
3	Number of Majors	n/a	n/a	0	
4	SSH Program Majors in Program Classes	n/a	n/a	0	
5	SSH Non-Majors in Program Classes	n/a	n/a	435	
6	SSH in All Program Classes	n/a	n/a	435	
7	FTE Enrollment in Program Classes	n/a	n/a	15	
8	Total Number of Classes Taught	n/a	n/a	7	
Efficiency Indicators					Efficiency Health Cautionary
		Academic Year			
		Fall 06	Fall 07	08-09	
9	Average Class Size	n/a	n/a	20.7	
10	Fill Rate	n/a	n/a	83%	
11	FTE BOR Appointed Faculty	n/a	n/a	0.0	
12	Majors to FTE BOR Appointed Faculty	n/a	n/a	0.0	
13	Majors to Analytic FTE Faculty	n/a	n/a	0.0	
13a	Analytic FTE Faculty	n/a	n/a	0.8	
14	Overall Program Budget Allocation	n/a	n/a	\$40,707	
14a	General Funded Budget Allocation	n/a	n/a	\$40,703	
14b	Special/Federal Budget Allocation	n/a	n/a	\$0	
15	Cost per SSH	n/a	n/a	\$93.57	
16	Number of Low-Enrolled (<10) Classes	n/a	n/a	0	
Effectiveness Indicators					Effectiveness Health Unhealthy
		Academic Year			
		2006	2007	08-09	
17	Successful Completion (Equivalent C or Higher)	n/a	n/a	85%	
18	Withdrawals (Grade = W)	n/a	n/a	2	
19	Persistence (Fall to Spring)	n/a	n/a	0%	
20	Unduplicated Degrees/Certificates Awarded	n/a	n/a	0	
20a	Number of Degrees Awarded	n/a	n/a	0	
20b	Certificates of Achievement Awarded	n/a	n/a	0	
20c	Academic Subject Certificates Awarded	n/a	n/a	0	
20d	Other Certificates Awarded	n/a	n/a	0	
21	Transfers to UH 4-yr	n/a	n/a	0	
21a	Transfers with degree from program	n/a	n/a	0	
21b	Transfers without degree from program	n/a	n/a	0	

C/P denotes that the measure is provided by the college, if necessary.

Distance Education Completely On-line Classes		Academic Year		
		Fall 06	Fall 07	08-09
22	Number of Distance Education Classes Taught	n/a	n/a	0
23	Enrollment Distance Education Classes	n/a	n/a	0
24	Fill Rate	n/a	n/a	0%
25	Successful Completion (Equivalent C or Higher)	n/a	n/a	0
26	Withdrawals (Grade = W)	n/a	n/a	0
27	Persistence (Fall to Spring Not Limited to Distance Education)	n/a	n/a	0%
Perkins IV Core Indicators				
Perkins IV Measures 2007-2008		Goal	Actual	Met
28	1P1 Technical Skills Attainment	90.00	0.00	Did Not
29	2P1 Completion	44.00	0.00	Did Not
30	3P1 Student Retention or Transfer	55.00	0	Did Not
31	4P1 Student Placement	50.00	0	Did Not
32	5P1 Nontraditional Participation	25.00	n/a	n/a
33	5P2 Nontraditional Completion	25.00	n/a	n/a

Part II. Analysis of the Program

The Fire Science Program was given provisional approval by the University of Hawaii Board of Regents in March, 2009. The current data does not give an accurate profile of the Fire Science Program.

For the academic year 08/09, all of the 145 students were classified as non-majors because provisional approval was not obtained until March 2009, too late for students to declare the Fire Science major until the following semester. For the fall semester, 2009 we currently have 37 declared Fire Science majors, and a total of 102 students enrolled in fire science courses. There was high demand this year, and all our freshman classes were filled. As the program continues there will be greater demand placed upon the college. The fire service, which provides high pay and job security, will continue the need for well educated candidates.

Demand Indicators failed to address that Hawaii Fire Department plans to recruit approx. 30 applicants per year for the foreseeable future. The Demand Indicators failed to address the need of Federal employment from the National Park Service and the U.S. Army.

Efficiency indicators indicate that the Fill Rate is healthy at 85% which may indicate that this new program demonstrates high interest. However, due to no

declared majors and no FTE BOR appointed Faculty resulted in unhealthy with the average determined to be cautionary. In the 09/10 academic year students will be able to declare Fire Science as their major. It is important that a BOR appointed Faculty be hired to teach and coordinate the Fire Science Program.

Students are successful in the Fire Science Program with 85% successfully completing courses. Persistence rate could not be accurately calculated due to no students could declare Fire Science as their major.

Program Outcomes (Perkins IV)

The zero data represents No Data taken or available rather than an absence of the number of students.

Significant Program Actions:

Student Temporary Employment Program (STEP)

We will continue to partner with the United States Forest Service (USFS) with providing a pool of applicants for the program. Under the STEP program the USFS pays the airfare from Hilo to Oregon and back, during the summer the student is placed with an engine or hand crew. The students gain valuable experience in wildland fire suppression and funds for college expenses. During the 2008 summer season we provide two students and three students during the 2009 summer season. As the economy continues to improve I anticipate more students being able to participate in this program. The USFS is very excited about this program and have been very pleased with the quality of candidates we have provided.

Colorado State University

Hawaii Community College entered into an articulation agreement with Colorado State University (CSU) to provide fire science majors the opportunity to obtain a Bachelor of Science Degree in Fire Administration. All fire science courses attained at Hawaii Community College are transferrable as undergraduate credits. Students who complete the AS degree in Fire Science would be able to enroll and obtain a degree from CSU through distance learning.

Office Space

The Fire Science program was able to secure office space. Students are now able to meet with the fire science staff in a private setting. This also provides space to secure materials need to administer the program.

Representation

Continue to represent the Hawaii Community College Fire Science Program at:

- Meetings of the Big Island Wildfire Coordinating Group (BIGWIG) whose members also support the college's Fire Science Advisory Board.
- Attend the annual Hawaii Fire Chief's Association conferences. Participates are potential employers of our graduating students, and it is necessary to keep abreast of the latest issues and technology in the fire service.
- Attend the California, Nevada, and Hawaii Fire Council conferences which are held every other year in Hawaii. In addition to Hawaii there are potential employers from federal, state and local fire agencies from the mainland.

Cooperative Agreement

Hawaii Community College has presented a Cooperative Agreement to the Hawaii Fire Department which would allow qualified students to train and work at various fire stations. The agreement is currently being reviewed for approval by the Hawaii County Solicitor's Office.

Perkins Funding

We have requested a total of \$3,463.00 for reference material to include the National Fire codes, Life Safety Codes, and hazardous materials guidelines.

Part III. Action Plan

- Request 1.0 FTE Fire Science faculty to teach and coordinate the program.

Part IV. Resource Implications (physical, human, financial).

The Fire Science program would like to request a 1.0 FTE Fire Science Instructor/Program Coordinator position to teach and administer program activities.

Cost:

Salary: 1.0 FTE = \$ 51,408.00

Fringe: 36% = \$ 18,506.00

Total Costs: \$ 69,914.00

Justification:

The Fire Science program has demonstrated the need for such a program on the Island of Hawaii. The number of students wanting to enroll in Fire Science courses outweighs the current capacity of the college. There is a need for someone to provide continuity, continue to develop, and provide leadership in administering the Fire Science program.

Annual Report Program Data and analysis located on college website at:

[HawCC Completed 2009 Program-Unit Reviews](#)