UNIVERSITY OF HAWAI`I
HAWAI`I COMMUNITY COLLEGE

Provisional to Established
Program Proposal

Certificate of Achievement (C.A.) and Associate in Science (A.S.) Degrees In Fire Science

Date of Proposal:       Spring 2012
Proposed Date of Permanent Status:  Fall 2012
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1. Organization of the Fire Science Program

Background

Until 2005 Honolulu Community College offered the only Fire Science program, an Applied Associate of Science (A.A.S.) degree, within the University of Hawai`i system. However, for a variety of reasons, A.A.S. degree program in Fire Science at Honolulu Community College does not meet the needs of students residing on the Big Island. Students on the Big Island could not obtain a degree in Fire Science without relocating to Honolulu, making it impractical for working students or students with limited resources, and students with family obligations to obtain a degree. Hawai`i Community College’s Fire Science program offers an affordable option for neighbor island students to advance their status for entry and promotion in the Fire Service field. In 2005 the Fire Science Program at Hawaii Community College began with courses taught by a retired Fire Chief. Fire courses were fully supported for two years by extramural funds awarded under the U.S. Department of Labor’s Rural Development Program. The program became funded by the college in the fall of 2007, supplemented by Perkins funding to acquire reference and training materials. The University of Hawai`i, Board of Regents provisionally approved both a Certificate of Achievement (C.A.) and an Associate of Science (A.S.) degree in Fire Science in March 2009.

Curriculum

The Fire Science Program is open to any high school graduate or person 18 years of age or older. The A.S. degree program in Fire Science at Hawai`i Community College prepares students with the academic knowledge necessary for entry level employment in the Fire Service field and
provides the in-service and continuing education to professionals already employed. The target populations of the Fire Science program generally include:

- high school graduates and non-traditional students who seek employment opportunities as a fire services professional;
- currently employed professionals who seek to enhance their opportunities for career advancement and promotion; and
- volunteer fire fighters (over 300 volunteers island-wide) who seek to upgrade their skills and knowledge.

Upon completion of the A.S. degree program in Fire Science, students possess the knowledge to serve in a career with federal, state, and local fire and emergency service agencies including:

- Hawai`i Fire Department;
- State of Hawai`i Division of Forestry and Wildlife;
- National Park Service;
- U.S. Fish and Wildlife Service;
- U.S. Army
- Hawai`i County Civil Defense; and
- County of Hawai`i Airports

The Fire Science program educates students in the areas of structural firefighting, wildland fire suppression, hazardous materials response, fire prevention and investigation, fire service management and administration, and Incident Command System (ICS) core competencies, which is a standardized, on-scene, all-hazards incident management approach established by the National Wildfire Coordinating Group (NWCG).

In addition, the A.S. degree program in Fire Science prepares students to pursue a Bachelor of Science degree in Fire Sciences. Currently, there is no four-year degree program in Fire Science within the University of Hawai`i System. However Hawai`i Community College has an articulation agreement with Colorado State University (CSU) that enables graduates with an A.S.
degree in Fire Science to pursue a Bachelor of Science degree in Fire and Emergency Services Administration through distance learning. All Fire Science courses and select general education courses, up to 61 credit hours, are transferrable to CSU, leading to a Bachelor of Science in Fire and Emergency Services Administration. Students have opportunity to earn a four-year degree in Fire Science without having to leave the island of Hawai‘i (See Appendix D).

Based upon the Fire Science Program Learning Outcomes (PLO), successful completion of the A.S. degree program in Fire Science, students are able to:

1. 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. Perform as a fully qualified wildland firefighter in accordance with National Wildfire Coordinating Group (NWCG) PMS 310-1 standards;
3. Utilize the Incident Command System to manage a wide variety of planned and un-planned incidents;
4. Demonstrate knowledge of modern fire service strategies, tactics, and management for both structural and wildland fire incidents;
5. Meet the requirements for first responder Awareness and Operations Levels for Hazardous Material Incidents in accordance with the National Fire Protection Association (NFPA) 472;
6. Apply the principles of interpersonal communication, cooperative teamwork, supervision, and management for leadership in the fire service;
7. Apply the theoretical principles of the chemistry of fire and hydraulics to solve water supply problems.

The C.A. in Fire Science requires a student to complete 12 Fire Science courses (34 credits) with a minimum GPA of 2.0 and a “C” grade or higher in all Fire Science courses. The A.S. in Fire Science requires a student to complete the same 12 Fire Science courses plus additional general education courses. Both degrees programs can be completed in two years if students take all recommended courses in sequence beginning in the fall semester as follows:
## Fire Science Curriculum

<table>
<thead>
<tr>
<th>Course Description</th>
<th>CA</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester (Fall)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Fire 101 Essentials of Fire Suppression++</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>*Fire 101L Essentials of Fire Suppression++</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>*Fire 151 Introduction to Wildland Fire Control++</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>*Fire 156 Incident Command System++</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Eng 100 Expository Writing or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eng 215 Research Writing ++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math 100 Survey of Mathematics ++, or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phil 110 Introduction to Logic++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 credits</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Second Semester (Spring)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire 153 Advanced Wildland Fire Control++</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Fire 157 Intermediate Wildland Fire Behavior++</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Chem. 100 Chemistry for Non-Science Majors</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Chem. 100L Chemistry for Non-Science Majors, or</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Chem. 151 Elementary Survey of Chemistry ++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chem. 151L Elementary Survey of Chemistry ++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICS 101 Digital Tools for the Information Age, or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICS 100 Computing Literacy &amp; Applications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 credits</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

**Student Temporary Employment Program (Optional)**  
No Credit

<table>
<thead>
<tr>
<th>Course Description</th>
<th>CA</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Third Semester (Fall)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire 212 Fire Fighting Tactics and Strategies++</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Fire 215 Wildland/Urban Interface Operations++</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Fire 202 Fire Hydraulics++</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Botany 130 Plants in Hawai`i an Env. (Natural Environment)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Botany 130L Plants in Hawai`i an Env., or</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Botany 101 General Botany ++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botany 101L General Botany++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biology 100 Human Biology++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 credits</td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Description</th>
<th>CA</th>
<th>AS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fourth Semester (Spring)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire 207 Hazardous Materials Operations++</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Fire 210 Fire Administration++</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Fire 217 Firefighter Life Safety++</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Spco 251 Public Speaking (Cultural Environment), or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spco 260 Media and Society ++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective (Social Environment 100 level or higher)</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>(Anth 200, Econ 120, 130 131, Psy 100, Soc 100, 218)++</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 credits</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Fire 293 Cooperative Education (Optional Elective)      |    | 3  |

Total credits required:  
Certificate of Achievement (C.A.) Degree: Total: 34 Credits  
Associate in Science (A.S.) Degree: Total: 61 Credits  

**Note:** *indicates mandatory entry level courses.  
++ indicates courses transferrable to Colorado State University (CSU)
2. Assessment of Student Learning

Evaluation of student performance and progress takes place at the course level and is measured using a standard grading system:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90-100 %</td>
</tr>
<tr>
<td>B</td>
<td>80-89 %</td>
</tr>
<tr>
<td>C</td>
<td>70-79 %</td>
</tr>
<tr>
<td>D</td>
<td>60-69 %</td>
</tr>
<tr>
<td>F</td>
<td>&lt;59 %</td>
</tr>
</tbody>
</table>

Methods of evaluation of student performance and progress are explained in course syllabi and related to course learning outcomes to which assignments are correlated.

Hawai`i Community College has identified the Institutional Learning Outcomes (ILO) for our students.

**Institutional Learning Outcomes**

1. Our graduates will be able to communicate effectively in a variety of situations.
2. Our graduates will be able to gather, evaluate, and analyze ideas and information to use in overcoming challenges, solving problems and making decisions.
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.

However, in order to reach those goals there is a coordinated and building block approach. Each FIRE PLO is aligned to the College’s ILOs (see below). Each fire course has established specific Student Learning Outcomes (SLO). When students have successfully completed the fire program they then would have met the Program Learning Outcomes (PLO) and College’s ILOs.

**ILO alignment to PLO**

<table>
<thead>
<tr>
<th>ILO</th>
<th>PLOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3, 4 &amp; 6</td>
</tr>
<tr>
<td>2</td>
<td>3, 4, 5 &amp; 7</td>
</tr>
<tr>
<td>3</td>
<td>1, 2, 5 &amp; 6</td>
</tr>
</tbody>
</table>
Each course has explicit set of learning competencies. For example, the course-specific learning outcomes for Fire 156 Incident Command System (ICS) align, as follows with the Fire Science Program Outcomes:

<table>
<thead>
<tr>
<th>FIRE 156 Student Learning Outcomes</th>
<th>Fire Science Program Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyze the incident and identify key positions using ICS terminology</td>
<td>Utilize the Incident Command System to manage a wide variety of planned and unplanned incidents.</td>
</tr>
<tr>
<td>Analyze and develop an Organization Chart using ICS principles appropriate with the incident complexity</td>
<td>Utilize the Incident Command System to manage a wide variety of planned and unplanned incidents.</td>
</tr>
<tr>
<td>Organize resources into a unified command structure.</td>
<td>Demonstrate knowledge of modern fire service strategies, tactics, and management for both structural and wildland fire incidents.</td>
</tr>
<tr>
<td>Give a professional and articulate presentation. Demonstrate strong group communication skills and speak clearly during course discussions.</td>
<td>Apply the interpersonal communication, cooperative teamwork, supervision, and management for leadership in the fire service.</td>
</tr>
<tr>
<td>Demonstrate strong group communications when giving presentations of assignments.</td>
<td>Apply the interpersonal communication, cooperative teamwork, supervision, and management for leadership in the fire service.</td>
</tr>
<tr>
<td>Utilizing Management by Objectives principles, identify objectives, strategies, and tactics necessary to manage the incident.</td>
<td>Demonstrate knowledge of modern fire service strategies, tactics, and management for both structural and wildland fire incidents.</td>
</tr>
<tr>
<td>Gather data and determine Incident Complexity.</td>
<td>Utilize the Incident Command System to manage a wide variety of planned and unplanned incidents.</td>
</tr>
<tr>
<td>Show the process where resources up to 2000 personnel are tracked and managed during an incident.</td>
<td>Utilize the Incident Command System to manage a wide variety of planned and unplanned incidents.</td>
</tr>
</tbody>
</table>

**Graduation history:**

Spring 2010: 1 student AS degree  
2 students CA degree (1 student a HFD employee)

Spring 2011: 3 students AS degree (1 student accepted into HFD)  
1 student CA degree

Spring 2012: 9 students AS degree (1 student a HFD employee)  
2 students CA degree (1 student entered Hawai‘i Sheriff Dept.)
3. Adequacy of Program Resources

Hawai`i Community College has demonstrated its ability to provide adequate resources by providing ongoing support during the provisional period. The Fire Science Program is part of the Social Science Department headed by a department chairperson. The Fire Science program has one full time faculty as an Instructor/Program Coordinator, and has hired several Lectures as student demand warranted. The Fire Science Instructor/Program Coordinator is responsible for instructing fire courses, administering the program, monitoring budget expenses, monitoring student progress, modifying course curriculum as needed, actively promoting and recruiting new students, hiring and evaluating lecturers as needed, and representing the Fire Science Program at several professional organization meetings. The fulltime faculty has a Bachelor of Science degree from Northern Arizona University and 35 years’ experience in the fire service to provide an effective program and provide student support to promote the successful completion of the program. We have hired lecturers who either have worked for, or are currently employed by the Hawai`i Fire Department.

Hawai`i Community College and the Hawai`i Fire Department have developed a close working relationship which has allowed the college to establish a laboratory course for our Introductory to Structural Firefighting class. Students have the use of the Central Fire Station facilities and equipment at no cost to the college. The National Park Service (NPS) provides support to the program by providing equipment such as a portable pump kit for in-class demonstration at no cost to the college.
Fire Science classes are held in the evenings when regular classrooms aren’t normally in use.

There are very few costs associated with administering the fire program. With Perkins funding the Edwin H. Mookini Library purchased a complete set of the National Fire Codes published by the National Fire Protection Association (NFPA) and numerous reference books including but not limited to the NFPA101 Life Safety Code, Hazardous Materials.

The initial first two years, the program expenses exceeded revenue because of set up expenses.

In the last six years, the program has generated more income than its expenses.
In the cost analysis template above, expenditures and revenue for the last four years have been obtained from budget reports and reflect actual data. The rationale for the projected years is provided below:

- The annual SSH (B) is calculated based on the assumption that the program will maintain its current enrollment trends.
- A calculation of instructional costs without fringe (C) maintains the current instructional staffing levels. The instructional cost in the projected years has been adjusted to reflect UHPA collective bargaining raises until the end of the current contract and kept flat thereafter.
- Other personnel costs (D) include the salary costs for personnel supporting the program.
- The FS program does not anticipate unique program costs (E) which include supplies and equipment costs. Currently other local and federal agencies are allowing us to use their equipment at no costs to the college.
✓ Revenue generated by tuition (G) is based on the number of student semester hours multiplied by the applicable tuition fees.

✓ During the years that the FS program has operated as a provisional program, the College did not need other sources of revenue (H) to support this program.

✓ The net cost of the program (J) by the end of the projected years shows the FS program generates income for the College.

✓ The program cost per student semester hour in (M) is a calculation that includes both instructional and support costs.

4. Program Efficiency

The Fire Science Program was given provisional approval by the University of Hawaii, Board of Regents in March, 2009. As a result of a five year review of the program the Fire Science program has made several changes in the curriculum to strengthen the program and align better with the industry. The Fire Science Advisory Board approved the following changes to the curriculum. The program added Fire 101L, which is a lab for the Fire 101 course. The Hawaii Fire Department has allowed the program the use of the Central Fire Station at no cost to the college to teach the lab. Physics 100 is no longer a required course, but a new program requirement, Biology 100, Human Biology was implemented. Since most firefighters are first responders with some Emergency Medical Response, understanding how the body works will better prepare them for certification. We provided students with several optional classes based on whether or not the student planned upon graduation to pursue a Bachelor’s Degree from Colorado State University or begin a career in Fire Science.

Strengths

The demand for enrollment into the Fire Science program continues to grow. For the fall 2009 semester we had 53 students who have declared Fire Science as their major, and for the fall 2011
semester we had 111 students who declared Fire Science as their major with Hawaiian and Pacific Islanders making up 33% of the program. In addition, our partnership with the Hawaii Fire Department (HFD) has allowed us to offer a Fire 101 Essentials Lab course which provides our students with hands-on experience using the facilities at the Central Fire Station with no charge to the college. This past summer 10 students were hired as firefighters by the U.S. Forest Service (USFS) through the Student Temporary Employment Program (STEP). The USFS plans to continue this program, and is expected in March 2012 to recruit students for the summer 2012 season. In May 2011, three students with an Associate in Science, Fire Science degree graduated. We continue to have Hawaii Fire Department personnel enrolled in the program who are pursuing degrees which will enhance their promotion potential within the department.

**Weaknesses**

The Fire Science Program is currently developing a cadre of qualified lecturers to address the demand for courses. The majority of classes are currently taught during the evening hours when classrooms are more readily available, but limited space poses a challenge to offer more classes. The program has not offered any distance education classes, but will consider the possibilities.

**Successful Student Employment**

The United States Forest Service (USFS) from Region 6 (Oregon and Washington States) annually visits Hawai`i Community College to recruit students under the Student Temporary Employment Program (STEP). Under this program the USFS pays students airfare from Hilo to
the mainland, students are then assigned to a fire crew where they fight fires and make money, they are then paid airfare back to Hilo to attend school in the fall semester.

- 3 students hired summer of 2009
- 7 students hired summer of 2010
- 6 students hired summer of 2011
- 10 students hired summer of 2012

Several students who were enrolled in the program have found employment with the Hawai`i Fire Department, Hawai`i State Sheriff Office, US Forest Service, and US Fish and Wildlife Service.

**U.S. Army**

There is a signed agreement between the Department of the Army and Hawai`i Community College which covers the Student Career Experience Program (SCEP). The agreement establishes the opportunity for employment as a Fire Fighter with the U.S. Army at the Pohakuloa Military Training Area on the Island of Hawai`i. Currently the military is unable to fill vacant positions due to budget restrictions (See Appendix B).

The California, Nevada and Hawai`i Fire Council awards three $1,000.00 scholarships Annually to Fire Science students who reside in California, Nevada and Hawai`i. The purpose of the scholarship program is to support individuals pursuing an education that will lead to a career in the fire science profession. In 2011 two of the three scholarships were awarded to students enrolled in the Fire Science program at Hawai`i Community College.
5. Evidence of Program Quality

In the United States there are two organizations that dictate training, educational, and qualifications for the fire service. The National Fire Protection Association (NFPA) establishes structural fire standards, and the National Wildfire Coordinating Group (NWCG) establishes wildland fire standards. The NFPA adopts NWCG standards so there is no conflicting training and educational standards.

The mission of the National Fire Protection Association, which is an international nonprofit, established in 1896, is to reduce the worldwide burden of fire and other hazards on the quality of life by providing and advocating consensus codes and standards, research, training, and education. The world's leading advocate of fire prevention and an authoritative source on public safety, NFPA develops, publishes, and disseminates more than 300 consensus codes and standards intended to minimize the possibility and effects of fire and other risks. NFPA membership more than 70,000 individuals around the world.

The HawCC Fire Science Program maintains a high level of quality by meeting training standards approved by the National Fire Protection Association (NFPA). The International Fire Service Training Association (IFSTA), which is a non-profit educational association, is organized to develop training materials for the fire service curriculums that meets NFPA standards. We purchase the IFSTA Instructor and student text material from Fire Protection Publications, Oklahoma State University, Stillwater, OK.
The other organization is the National Wildfire Coordination Group (NWCG) which was chartered by Congress in 1973 to establish training and qualifications standards for all the federal Agencies that fight wildland fires. In addition to federal agencies, numerous state and local Agencies adopt and recognize NWCG training standards. The Fire Science program uses an Instructor Guide and student workbook text material which are ordered from National Interagency Fire Center, Great Basin Supply Office, Boise, ID. We follow the same curriculum that is taught nationwide. For certain courses, students receive a training certificate signed by the Fire Science Instructor. This training certificate is recognized by federal and state agencies in Hawai`i and the mainland. Our students who were enrolled in STEP this past summer were allowed to immediately be assigned to a fire duty station because of their training certificates.

**Student Evaluations**

The faculty and lectures review student ecafe results. We do review comments using the ecafe system. Although students are encouraged to evaluate the courses, and are told the importance of feedback, only a small percentage completes the ecafe student evaluation. I plan to correct this by developing a confidential Student Feedback Survey specific to the Fire Science program. From spring 2011 to spring 2012, 13 FS courses were taught. A total of 315 students were enrolled, but only 74 participated in ecafe. Below are the results:

**Overall the Instructor was effective**

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total number of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>12</td>
<td>28</td>
<td>34</td>
<td>74</td>
</tr>
</tbody>
</table>
Most student comments fell into two areas as listed below:

- “Do more hands-on activities in and out of class”.

As a result, a Lab for our Fire 101 Essentials of Fire Suppression course was developed. The Hawai‘i Fire Dept. has supported our program (See Appendix C) by allowing our students to use their facilities and equipment at no cost to the college. Students are now able to have a more hands-on experience.

- “The class was very interesting. Many stories explaining how things can go wrong and what to watch for to make sure they don’t.”

I would often relate real events that I have experienced over my 35 years in the fire service. Students were then able to translate the subject in class to how it would relate in a real life setting.

**Faculty**

The full time Fire Science Instructor/Program Coordinator has 35 years’ experience in the Fire Service, and retired as the Pacific Island Fire Management Officer (Fire Chief) for the National Park Service. In addition, he was Nationally Qualified as an Incident Commander Type III, Division/Group Supervisor, Prescribed Burn Boss Type II, and Resource Unit Leader. The Fire Science Instructor /Program Coordinator faculty member maintains quality control by the following:

1. Maintaining membership in professional organizations, National Fire Protection Association (NFPA), Hawai‘i Fire Chiefs Association, California, Nevada and Hawai‘i Fire Council, and Big Island Wildfire Coordinating Group.

2. Attending conferences to keep abreast of issues that impact the fire services such as the annual Hawai‘i Fire Chiefs Association meetings, the bi-annual California, Nevada, and
Hawai‘i Fire Council meetings. At these conferences participants are shown the latest technology in the fire service.

3. Attend seminars such as those sponsored by the Pacific Island Consortium. One seminar covered topics associated with “new Tools and Approaches to Managing Wildfire Threats in Hawai‘i”.

4. Receive professional periodicals, such as the monthly National Fire Protection Association magazine, monthly issues of FIRE RESCUE Magazine which is the Official Magazine of the International Association of Fire Chiefs and Fire-Rescue International.

Colorado State University
This Articulation Agreement further establishes the Fire Science program quality. Hawai‘i Community College has an Articulation Agreement with Colorado State University (CSU).

Before the agreement was made with CSU, they reviewed all the Fire Science courses for content and quality (See Appendix D).

6. Compatibility of Program Objectives with Mission and Vision of the College

Mission: Hawai‘i Community College (Hawai‘i CC) promotes student learning by embracing our unique Hawai‘i Island culture and inspiring growth in the spirit of “E ‘Imi Pono” (seeking excellence). Aligned with the UH Community Colleges system’s mission, we are committed to serving all segments of our Hawai‘i Island community.

The Fire Science program seeks to serves all segments of our Island community in two ways. First, the program provides Hawai‘i island youth the opportunity to strive for excellence and growth in the field of Fire Science. By offering a fire science certificate and degree program,
Hawai`i Community will increase the employment opportunity for its students, making them highly competitive in a career that offers living wage salaries and job stability. Second, these fire science professionals will serve and ensure the safety and well-being of its community. The fire service graduates provide communities with first responders for a wide variety of natural and man-made emergencies. There is the need to help each other during emergency incidents since the Island of Hawai`i has limited resources available.

The Fire Science program naturally provides a reflection of Hawai`i Island culture in all of its courses. According to the Office of Records and Internal Data Management, the Fire Science program has 117 students who have declared Fire Science as their major. For the fall 2011 semester, of the students we have data there were 33% are Native Hawaiian, 12% Caucasian, and 21% all others.

**Vision:** To promote student learning, Hawai`i Community College will emphasize the knowledge and experience necessary for students to pursue academic achievement. As lifelong learners, the students will become productive and engaged citizens capable of meeting the complex challenges of a global community.

To promote student learning, the Fire Science program will emphasize and provide the knowledge and experience necessary for students to pursue their career goal. As lifelong learner, members of the fire service will need to continually maintain their level of expertise due to keeping up with the increasing complex nature of the profession. The fire service employees need to meet the complex challenges of a global community as it provides a wide array of services to the community. The Fire Science program provides federal, state and local agencies a pool of well-educated applicants for a career in the fire service. As we have seen, the importance of first responders during natural or man-made emergency incidents is invaluable for the community to regain normalcy. They respond to: Emergency Medical Service (EMS), hazardous
materials, search and rescue to include water rescues and provide communities with fire
education, fire prevention, and fire inspection. Knowledge of laws, codes, policies, procedure,
and use of highly technical equipment all require training and education. After graduation
students are prepared for careers in the fire service. Currently the Hawai`i Fire Department gives
individuals with an AS degree in Fire Science 6 points for both recruitment and promotion
within the department. During recruitment those 6 points can make the difference when seeking
employment. Several members of the Hawai`i Fire Department are enrolled in the Fire Science
Program in order to enhance their promotion opportunities.

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Joe Molhoek, Pacific Island Fire Management Officer</td>
<td>National Park Service</td>
</tr>
<tr>
<td>Mr. Darren Rosario, Fire Chief</td>
<td>Hawai`i Volcanoes National Park</td>
</tr>
<tr>
<td>Ms. Denise Laitinen</td>
<td>Hawai`i State Firewise Community Coordinator</td>
</tr>
<tr>
<td>Mr. Eric Moller, Fire Chief</td>
<td>Hawai`i County Civil Defense</td>
</tr>
<tr>
<td>Ben Fuata, Director</td>
<td>Hilo, HI 96720</td>
</tr>
<tr>
<td>Mr. Andrew Kikuta</td>
<td>Hakalau National Wildlife Refuge, US Fish and Wildlife</td>
</tr>
<tr>
<td>Mr. Miles Nakahara, President</td>
<td>Hawai`i Wildfire Management Organization</td>
</tr>
<tr>
<td>Mr. Wayne Ching, Fire Management Officer</td>
<td>Hawai`i State Division of Forestry and Wildlife</td>
</tr>
</tbody>
</table>
Faculty Representatives

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Jack M. Minassian</td>
<td>Fire Science Instructor/Program Coordinator</td>
</tr>
<tr>
<td>Pacific Island Fire Management Officer (Ret)</td>
<td></td>
</tr>
<tr>
<td>Mr. Darryl Oliveira</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Hawai`i Fire Department Fire Chief (Ret)</td>
<td></td>
</tr>
<tr>
<td>Mr. Kaleo Quintana</td>
<td>Fire Science Counselor</td>
</tr>
<tr>
<td>Various Hawai`i Fire Department Personnel as needed.</td>
<td>Lecturers</td>
</tr>
</tbody>
</table>

Campus Administration

<table>
<thead>
<tr>
<th>Name</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Ms. Noreen Yamane</td>
<td>Chancellor</td>
</tr>
<tr>
<td>Ms. Joni Onishi</td>
<td>Interim Vice Chancellor for Academic Affairs</td>
</tr>
<tr>
<td>Mr. Guy Kimura</td>
<td>Interim Dean of Liberal Arts and Public Service</td>
</tr>
<tr>
<td>Dr. Trina Nahm-Mijo</td>
<td>Social Science Department Chair</td>
</tr>
</tbody>
</table>

7. **Appropriateness of Program Objectives and Employment Projection**

An Associate in Science degree in Fire Science prepares students for a career with federal, state and local governments in the field of Fire Service. Since 9/11 the role of the first responder has demonstrated the need for a well-trained and educated workforce. Even during these tough economic times the fire service has seen minimum budget cuts. The public will always demand a professional response to emergency incidents. Students who complete their AS degree have the opportunity to continue their education by obtaining a Bachelor of Science degree in Fire and Emergency Services Administration from Colorado State University though distance learning. This will also expand their employment opportunities.
Future Demand

By analyzing the past and present, this gives us an indication of where the direction of the fire service will be going in the future. The firefighter of today is no longer a vocational job but requires individuals to have a high degree of education to perform as an effective member in the fire service. Just recently, the federal government requires a BS degree in fire or a natural science to hold any GS-401-9 or higher fire management position in all federal agencies. Our program serves as a pathway along with our agreement with Colorado State University to meet this need.

The knowledge and training required to perform the job of firefighter has increased due to the complexity and nature required to perform in a professional manner. For example the Hawai`i Fire Department recruitment process was three months, but it has expanded to one year due to the increased knowledge and complexity of the job. The International Association of Fire Chiefs (IAFC) Certified Fire Officer Designation will require a minimum education level of a bachelor’s degree in 2009 for Fire Officer Positions.

There is a need for a Bachelor of Science Program in Fire and Emergency Services in the State of Hawai`i.

The A.S. Degree in Fire Science program at Hawai`i Community College is currently the highest level of formal education for the fire and emergency services profession in the State of Hawai`i. The three top employers for fire service personnel in 2009 were the State of Hawai`i, County of Hawai`i, and U.S. Government respectively.

From 2000 to 2010, the population of the Island of Hawai`i increased by 24.5% with a population of 185,079. The Island of Hawai`i has the highest rate of growth in the State of
Hawai`i. As the population continues to increase, the demand for emergency services will continue.

According to the Economic Modeling Specialist Inc. (EMSI) report provided by the UHCC system, between the six year period 2012-2018 the occupation is expected to grow:

Statewide: From 1638 jobs to 1785 jobs. Through new jobs and attrition, expect 75 openings per year. The median wage is $24.90 and the average is $25.29.

Hawai`i County: From 281 jobs to 299 jobs, expect 12 openings per year. The median wage is $23.14 and the average is $24.04.

*Note: Hawai`i Fire Department currently has 350 paid firefighter positions. In 2010 the HFD hired 20 new firefighters, and for 2012 they will hire 18 firefighters.
Appendix A

Fire Course Descriptions

Fire 101—Essentials of Fire Suppression (3)

PreReq: Eng 21 or placement in Eng 102, CoReq: Fire 101L, Fire 151, Fire 156

Provides students with a comprehensive initial introduction to suppression of structural fires. Introduces definitions, terminology, and a brief history of structural fire suppression. Provides students with a basic knowledge of fire behavior, how and what materials burn, extinguishment systems, and basic methods of suppression.

Fire 101L – Essentials of Fire Suppression Laboratory (1)

CoReq: Fire 101, Fire 151, Fire 156

A lab to accompany the Fire 101 lecture. Students will be provided with hands-on experience and instructed in the safe and proper handling of equipment used in the suppression of structural fires.

Fire 151—Introduction to Wildland Fire Control (3)

CoReq: Fire 101, Fire 101L, Fire 156

Introduces definitions, concepts, theories, and principles of modern wildland fire control. Provides students with an overall introduction to theory and application in basic wildland fire suppression, fire behavior, wildland fire operations, suppression methods, tools, and equipment. An emphasis on safety. Completion of this course meets current NWCG 310-1 standards for Firefighter Type 2, and the required training for issuance of a Red Card.

Fire 153—Advanced Wildland Firefighting (3)

PreReq: Fire 151

Designed to meet the training needs for both Advanced Firefighter/Squad Boss and Incident Commander Type 5 positions. Covers how to: properly document the appropriate information during fire suppression activities; incorporate and maintain open lines of communication with all appropriate fire suppression personnel; apply LCES (Lookouts, Communications, Escape Routes, and Safety Zones) to fire line tactics; and demonstrate the steps required to properly size up a fire situation and determine appropriate tactics.
Fire 156—Incident Command System (3)

CoReq: Fire 101, Fire 101L, Fire 151

Course describes the Incident Command System (ICS). Collectively, these features identify the unique quality of ICS as a management system for all emergency and planned event incidents. Principle features are: management by objectives, chain of command, transfer of command, organizational flexibility, integrated communications, common terminology, and developing an Incident Action Plan. In addition, Homeland Security Presidential Directive-5 requires all federal, state and local agencies to adopt the National Incident Management System (NIMS) which ICS is part of.

Fire 157—Intermediate Wildland Fire Behavior (3)

PreReq: Fire 151

 Designed to instruct prospective fireline personnel in wildland fire behavior for effective and safe fire management operations. Fire behavior is not an independent phenomenon - it is the product of the environment in which the fire is burning. Certain types of fire behavior are considered unusual or unexpected only because of the failure to evaluate properly the conditions, influences, and forces that are in control. To predict fire behavior, and to control and use fire effectively and safely, one must understand and use the interactions of fire with its environment. Examines the fire environment: what it is, how it varies and why and how fire itself alters the total picture.

Fire 202—Fire Hydraulics (3)

PreReq: Fire 101; and “C” or better in Math 25 or 25X or “C” or better in Math 26 or placement in Math 100

Introduces terminology, definitions, and basic and complex formulas involved in fire service hydraulics. Helps students gain an understanding of the complexities involved in modern apparatus pumping and water delivery systems. Focuses on commonly used equipment and applying simple and complex mathematical formulas (theory), plus standard rules applied in fire service to gain an overall understanding of hydraulics and hydraulics application.

Fire 207—Hazardous Materials Awareness and Operations (3)

PreReq: Fire 101

Students are introduced to initial response for Hazardous Material Incidents. Upon completion, the student will meet the training requirements of the National Fire Protection Association (NFPA), Office of Safety and Health Administration (OSHA), and the Office of Domestic Preparedness (ODP) to perform at the Operations level. Topics include: personal safety, regulations, toxicology, Incident Command System, decontamination, chemical resources, initial response, assessment, and strategic and tactical options for HAZMAT incidents.
Fire 210—Fire Administration (3)

PreReq: Fire 157

Provides the student with an overall understanding of the science, leadership, and modern management in the fire service. Topics include: developing a game plan for personal success, the principles of leadership and management, leadership ethics, managing emergency services, analytical approaches to public fire protection, and community disaster planning.

Fire 212—Firefighting Strategies and Tactics (3)

PreReq: Fire 156

Introduces essential elements, definitions, and terminology involved in analyzing the nature of fire, and determining needs and requirements to extinguish fires. Students develop an understanding of complexities involved in suppressing fires. Students will learn manpower, equipment, and practices with an emphasis on pre-planning, study of conflagration problems, and fire ground organization. This is a building block for future tactics and strategy classes taught by State and Federal fire programs.

Fire 215—Wildland/Urban Interface Operations (3)

PreReq: Fire 151

An introduction to the strategies, tactics, techniques, tools, and safety considerations related to fire operations in the wildland/urban interface. Involves aspects of suppression and prevention.

Fire 217—Firefighter Life Safety (3)

PreReq: Fire 156

This course was developed through the National Fire Academy's Fire and Emergency Services Higher Education (FESHE) initiatives. Firefighting is one of the nation’s most hazardous occupations. The National Fallen Firefighter Foundation's 16 Firefighter Life Safety Initiatives provide a framework within which fire and emergency response personnel can identify and address the issues that constitute risks of both injury and loss of life.
Appendix B

DEPARTMENT OF THE ARMY
STUDENT CAREER EXPERIENCE PROGRAM (SCEP)
TWO-YEAR ASSOCIATE DEGREE STUDENTS
US ARMY SUPPORT COMMAND, HAWAII
AND
HAWAII COMMUNITY COLLEGE (HawCC)

I. PURPOSE AND SCOPE
This Agreement establishes a basis of mutual understanding between the above parties in matters relating to Federal employment of cooperative education (Coop. Ed.) students who are enrolled in Associate degree programs. Cooperative Education is a planned and progressive, career-related student employment program. This program is designed to prepare students for Government Service (GS) occupations by alternating periods of academic study and work experience. By combining the advantages of a well-rounded education with the experience gained from actual work assignments, this program will enhance both the quality and quantity of graduate apprentices entering their respective career fields.

II. DEFINITIONS
As used here, "College" refers to Hawaii Community College (HawCC), "Agency" refers to US Army Support Command, and "Student" is defined as non-baccalaureate student who is studying at a qualifying 2-year college or technical institute for the purpose of completing an Associate Science fire Science (AS) Degree and who is considered in good standing. "Program" is the Student Career Experience Program (SCEP) established by this agreement.

III. RESPONSIBILITIES
In accordance with the provisions and responsibilities outlined in this Agreement, HawCC and US Army Support Command, Hawaii will work together to ensure that the academic and work experience aspects of the SCEP are carried out to the mutual satisfaction and benefit of the Student, HawCC, and US Army Support Command, Hawaii.

A. The College agrees to:
1. Designate a College Representative to work with the Agency liaison officer.
2. Inform all prospective students of Federal SCEP opportunities.
3. Refer all interested and qualified students to the Agency without any discrimination on the basis of race, color, religion, national origin, marital status, sexual orientation, age, arrest and court records, handicap, or status as a disabled veteran or veteran of the Vietnam era.
4. Correlate work and study in a manner that will assure maximum learning on the part of each Student.
5. Provide the student with courses related to his/her career field and assist the student in strengthening the relationship between study and work assignments.
6. The College Representative will inform Agency immediately when a student is dropped, or in danger of being dropped, from the SCEP because of either a school or student action.
7. The College Representative will advise Agency of administrative actions affecting the student; e.g., probation, change of major, work period schedule problems or changes, etc.
8. Incorporate Agency trainee evaluations in the student's Cooperative Education record, and for information exchange and program liaison purposes with Agency.
9. The College Representative will provide Agency with a list of Cooperative Education students who submit an application for graduation 30 days prior to the effective date of graduation.

B. The Agency agrees to:
1. Designate a staff member to maintain liaison with the College Representative.
2. Inform the College of work experience opportunities.
3. Consider and select students referred by the College without regard to race, color, religion, sex, age national origin, lawful political affiliation, physical handicap, marital status, or economic resources. Selection criteria will also include equal employment opportunity goals and veterans preference.
4. Advise HawCC of student(s) selected for the Federal Student Career Experience Program.
5. Orient the student to the work setting and to the career field to which he/she is assigned.
6. Provide the student with meaningful and increasingly responsible work assignments correlated to his/her academic work in the major functional areas of his/her career field and guide the student in carrying out the assignments.

7. Process all personnel actions relating to the Student's employment and keep all necessary employment records.

8. Furnish HAWCC with supervisory evaluations after each work period and keep HAWCC informed concerning student progress.

9. Maintain, as part of the student's records, work period evaluations.

10. Notify the College Representative of any personnel actions taken which may affect the status or tenure of the Student, including intent to release.

11. Provide counseling assistance to the student and a point of contact to facilitate information exchange and program liaison with the College's counterpart.

12. Provide the College with such additional information as may be necessary to assure effective mutual cooperation and successful program operation.

IV. CONDITIONS OF STUDENT EMPLOYMENT

A. Eligibility. A prospective student must:

1. Be at least 18 years of age and enrolled at HAWCC in a 2-year AS Fire Science Degree program and must be registered for classes upon entrance into the Agency. This includes registration in the Cooperative Education Course.

2. Be recommended to the Agency by the appropriate staff of the College.

3. Be a citizen of the United States, a native of American Samoa, the Northern Marianas, or Swains Island.

4. Completed Fire 151, Essentials of Fire Suppression, which meets the minimum academic training requirements of the National Fire Protection Association's (NFPA) Standard 1001, Standard for Fire Fighter Professional Qualifications (Fire Fighter I).

5. Maintain at least a 2.0 overall average on a 4.0 scale or the equivalent, a 2.5 GPA or above in all Fire Science courses, and a record as a student that in all respects is predictive of graduation.

6. Meet all medical and security requirements for employment at AGENCY.

7. Have graduated from a high school, or have obtained a GED High School Proficiency Certificate.

B. Appointments. An Agency may appoint a student who:

1. Is enrolled in and recommended by the College Cooperative Education Program.

2. Is in good standing (maintaining at least a 2.0 overall average on a 4.0 scale or the equivalent, a 2.5 GPA or above in all Fire Science courses at all times, and a record as a student that is predictive of graduation).

3. Meets the qualification Standards of the position.

4. Students are appointed under the authority provided by Schedule B 213.3203(a) or the Code of Federal Regulations except when the Agency has another approved appointing authority.

5. Upon successful completion of an AS Degree, 840 hours of work experience, and completion of the Agency's requirements the student may be converted to a career conditional appointment.

6. A student's appointment may be terminated at any time for any of the following reasons:

   a. Resignation

   b. Change to a curriculum, which will not qualify him/her for the position

   c. Failure to receive a "C" or better in two academic courses

   d. Suspension, expulsion or withdrawal from HAWCC

   e. Unacceptable performance in trade theory and/or work experience

   f. Failure to meet medical and security requirements for employment at AGENCY

   g. Inability of AGENCY for administrative reasons to retain the student on the job

   h. AGENCY workload/budget considerations

C. Student Work Schedules.

1. The College and the Agency will develop a work schedule for the student. However, a student's work schedule will not conflict with the school schedule. Overtime work should not be required or permitted except where unusual circumstances relating specifically to workload or timeframes make it necessary.

2. The work period will normally start as soon as the student is selected and meets the requirements for employment in the Agency.
3. No appointment under schedule B will be made to permit a student to be in employee status for more than 2 1/2 years (not including the 120-days allowed after graduation). Exception to the 2 1/2 year status may be made with prior approval of the APA & HRO.

4. Work periods will be scheduled so that the Student, by the date of graduation, can complete the required number of hours of work (640 hours) to make him/her eligible for noncompetitive conversion to a career conditional appointment during the 120 days after graduation.

D. Pay and Benefits.

1. Students will be paid in accordance with the regular pay schedules established for the apprentice pay level. They will receive any authorized payment for holidays and overtime.

2. Students will earn sick leave and annual leave in accordance with the provisions of 5 CFR 830. Students on a part-time schedule earn 1 hour of leave for every 20 hours in a biweekly pay period. Students on full-time schedule earn 4 hours of leave in a biweekly pay period.

3. Retirement. Students under Schedule B appointments will be covered by Social Security and Federal Employee Retirement System (FERS).

4. Life and Health Insurance. Students who are expected to be in pay status for at least one-third of the total time from the date of first appointment to the completion of the SCEP and who are serving under appointments not limited to one-year or less, automatically have basic life insurance coverage (unless it is waived by the student). They must be granted the opportunity to elect optional life insurance. These students may elect any plan under the Federal health benefits program for which they are eligible.

E. Trial Period and Performance Appraisal

1. The AGENCY supervisor will evaluate a student's performance during each work period.

2. The Agency supervisor will review and rate the student's performance periodically and at the end of the work period, and discuss the rating with the student.

3. For retention in the program, a student will be required to satisfy the academic standards of the College and the Agency. A student who fails to meet any of these standards will be advised of the areas needing improvement. If no improvement is shown, the student will be notified that he/she will be separated from the program.

4. The Student must maintain a C or better grade in academic courses. A student who fails to achieve at least a C in all credits graded at the end of the semester will be placed on academic probation and given an additional school semester to improve the grade on his/her own time and expense. If he/she does not improve the grade during this time frame, he/she will be terminated from the SCEP Program. If he/she fails 2 or more courses at the end of the semester, receiving a D or F, in either course(s) he/she will be terminated from the SCEP Program.

5. Students disqualified from continuing in the SCEP or not converted to career-conditional appointments will be terminated. These students cannot be reassigned noncompetitively to other positions in the AGENCY. Separations for these causes will provide no right to appeal to the Merit Systems Protection Board (MSPB) and they do not require agencies to follow the procedures of part 752 of OPM's regulations, except in the case of a veteran who completed one year of current continuous employment.

F. Consideration for Permanent Employment upon Program Completion. A SCEP student may be eligible for noncompetitive conversion to a career-conditional appointment if the following conditions are met:

1. The student has successfully completed all the requirements for an AS Fire Science Degree;

2. The student has completed one or more work period(s) totaling at least 640 hours.

3. The student meets all Agency qualification standards for the position he/she enters;

4. The Agency recommends him/her for conversion. If recommended, conversion must be effected within 120 days of graduation in accordance with all Agency guidelines and requirements.

V. THE AGREEMENT - MODIFICATION, EFFECTIVE DATE, AND TERMINATION

The College and the Agency will consider any amendments proposed by either party to the terms of the Agreement (including changes in the order and level of courses) and, by mutual consent, will amend this Agreement in writing. Since this program is conducted pursuant to the Code of Federal Regulations, changes in either regulations or law necessarily become effective without modification. However, the AGENCY will advise the College of such changes as quickly as possible, and, if substantive, they will be incorporated in this Agreement by mutual written consent as soon as practical.
This Agreement becomes effective when signed by all parties and shall continue indefinitely unless voided by either party upon 30-days written notice with date of termination to coincide with the end of the current academic term.

THE STUDENT CAREER EXPERIENCE PROGRAM AGREEMENT

Approved for the Agency:

By [Signature]
Eric H. Moller
Deputy Fire Chief
USAG-HI, DES, F&ES

25 May 2010
DATE

Approved for the College:

By [Signature]
Rockne C. Freitas, Chancellor
Hawaii Community College

DATE

[Signature]
March 23, 2013

Chancellor Namena Yamane
Hawaii Community College
200 West Hawai’i Street
Hilo, Hawaii 96720

Dear Chancellor Yamane,

RE: Letter of Support of the Fire Science Program

I would like to take this opportunity to convey my support of the Fire Science program at the
Hawaii Community College. I feel that the program is an important benefit to our community.
It is an opportunity that affords not only the personnel of our department to further educate
themselves in their career but even more so, as stepping stones to those who have interest in
public safety in the aspect of fire fighting as a career. Often students of the fire science programs
continue their interest as they pursue possible candidacy as fire fighter recruits.

I look forward to the continuing growth of the fire science program for all of our community.

Sincerely,


[Signature]

DARREN J. ROSARIO
Fire Chief

[Seal]
MEMORANDUM

To: Jack Minasian
   Hawaii Community College

From: Keli Beeman
      School of Education

Date: September 21, 2003

RE: Hawaii Community College Transfer Courses

Attached to this memorandum are the Hawaii Community College Fire Science courses that are transferable to Colorado State University (CSU). This listing of courses has been submitted to CSU’s Transfer Evaluation Office. These courses have been designated as wildland emitters in the Fire and Emergency Services Administration (FESA) degree program. Any students transferring from HCC will receive elective credit applicable to the FESA program.

This spreadsheet can be considered an official articulation agreement with the Fire and Emergency Services Administration program at Colorado State University. Transfer courses outside the Fire Science curriculum and not already transferable to CSU, should be assessed by the corresponding department.

Students planning on transferring to Colorado State should plan on completing CSU’s All University Core Curriculum. Classes meeting these requirements are outside the Fire Science curriculum and have been previously sent to you.

If you need any additional information, or have any questions, I can be reached at kbeeman@hcc.hawaii.edu or 901-2083.

Thank you!

Keli Beeman
Appendix E

Education Points

EDUCATION AND EXPERIENCE SUPPLEMENT

Calculation of Education and Experience Evaluation Points

FIRE/EMERGENCY MEDICAL SERVICES SPECIALIST III

1. **EDUCATION POINTS:** Only degrees from accredited colleges/universities will be recognized and given education points. Education points will be awarded in one category on the following basis:

<table>
<thead>
<tr>
<th>Level</th>
<th>Points Allowed</th>
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<tbody>
<tr>
<td>A. Associate of Arts/Science Degree</td>
<td>4</td>
</tr>
<tr>
<td>B. Associate Degree in Fire Science</td>
<td>6</td>
</tr>
<tr>
<td>C. Bachelor of Arts/Science Degree</td>
<td>8</td>
</tr>
<tr>
<td>D. Bachelor Degree in Fire Administration</td>
<td>10</td>
</tr>
</tbody>
</table>

Additional education points will be awarded for the following degree:

- Masters Degree in Fire Administration

The maximum number of points attainable for education is 14.

All educational credits claimed must be supported with official college transcripts and/or diplomas. Transcripts and/or diplomas should be submitted with your application. College credits claimed but not verified will not be recognized.
Fire Science Program Approval

Initiated by: ____________________________ Date: ___________
Jack M. Minassian
Fire Science Instructor/Program Coordinator

Requested by: __________________________ Date: ___________
Department Chairperson

Recommended by: ________________________ Date: ___________
Curriculum Committee Chairperson

Approved by: __________________________ Date: ___________
Academic Senate Chairperson

Approved by: __________________________ Date: ___________
Vice Chancellor of Academic Affairs

Approved by: __________________________ Date: ___________
Chancellor