HAWAI'I COMMUNITY COLLEGE
COMPREHENSIVE PROGRAM REVIEW (CPR)

Tropical Ecosystem and Agroforestry Management

Date __Feb 19, 2018__

3-Year Review Period:
July 1, 2014 to June 30, 2017
AY14-15, AY15-16 and AY16-17

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Program/Unit Review at Hawai'i Community College is a shared governance responsibility related to strategic planning and quality assurance. Annual and 3-year Comprehensive Reviews are important planning tools for the College's budget process. This ongoing systematic assessment process supports achievement of Program/Unit Outcomes. Evaluated through a college-wide procedure, all completed Program/Unit Reviews are available to the College and community at large to enhance communication and public accountability.
Please see http://hawaii.hawaii.edu/files/program-unit-review/

Please remember that this review should be written in a professional manner. Mahalo.

PART I: PROGRAM DATA AND ACTIVITIES

Program Description

Provide the short program description as listed in the current catalog.
Students learn to actively manage Hawaiʻi's native forest ecosystems, grow native plants, establish agroforestry operations, use Global Positioning Systems (GPS), and Geographic Information Systems (GIS). Internships give students on-the-job training with potential employers.

Previous Comprehensive Review Information

Provide the year and URL for the location of this program's last Comprehensive Review on the HawCC Program/Unit Review website: http://hawaii.hawaii.edu/files/program-unit-review/	
Year	**2014**
URL	**http://hawaii.hawaii.edu/files/program-unit-review/docs/2014_team_comprehensive_program_review.pdf**
Provide a short summary of the CERC's evaluation and recommendations from the program's last Comprehensive Review. Discuss any significant changes to the program that were aligned with those recommendations but are not discussed elsewhere in this report.	Although a comprehensive review was submitted for the TEAM program in 2014, no recommendations were provided for the program.

<u>**ARPD Data: Analysis of Quantitative Indicators**</u>

Program data can be found on the ARPD website: http://www.hawaii.edu/offices/cc/arpd/

Please attach a copy of the program's data tables for the three years under review and submit with this Comprehensive Program Review (CPR).

a) **If you will be submitting this CPR in hard copy, print and staple a copy of the data tables for the three years under review to the report; the icon to print the data tables is on the upper right side, just above the data tables.**
   OR

b) **If you will be submitting this CPR in digital form (WORD or PDF), attach a PDF copy of the data tables for the three years under review along with the digital submission; the icon to download the data tables as a PDF is in the upper right of the screen, just above the data tables.**

Analyze the program's ARPD data for the 3-year review period.

Describe, discuss, and provide context for the program's AY15 through AY17 data, including the program's health scores in the Demand, Efficiency, Effectiveness, and Overall Health categories.

Demand: In 2015 and 2016 APRD, the demand scores were unhealthy, while in 2017 the demand health call is cautionary. The scores are misleading as the number of new and replacement figures for the County and State bear very little relevance to the total number of positions that open up for our graduates within this narrow CIP. Many of our graduates end up working for the Federal government (USFS, NPS) and in the private sector. According to our calculations, the demand is higher than these data suggest.

Efficiency: During all three years, the efficiency health call was cautionary. This appears to be primarily due to the number of low enrolled program classes, which hovered around 6-7 students for the average class size. This is not surprising for a small, specialized program that is designed to train forest technicians. On the bright side, the class fill rate has been slowing increasing from 38% in 2015 to 42.2% in 2017.

Effectiveness: 2015 and 2017 reports are deemed cautionary, while 2016 is deemed healthy. This appears to be due to the higher percent of successful completion of course work in 2016 (93% vs 88% and 63%). That year also produced more unduplicated degrees awarded; 7 verses 6 in 2015 and 4 in 2017. Persistence from fall to fall and fall to spring semesters was also higher in 2016.

Overall, these data provide a cautionary call to the program, which from most accounts is due to the small size of the program and dependent on the number of jobs in forestry and natural resource

conservation sectors.

Describe, discuss, and provide context for the program's data in the Distance Education, Perkins Core Indicators, and Performance Funding Indicators categories, as applicable.

During this reporting period, distance education was not offered. The Perkins indicators for Technical skills attainment, Completion, Non-traditional participation and completion were all met. As for the Student retention or transfer indicator, this was not met, presumably because some students did not complete the program or changed their major. Additionally, the student placement indicator was not met, which is surprising given the following definition of Perkins IV Student Placement Core Indicator:

Numerator: Number of CTE concentrators who were placed or retained in employment, or placed in military service or apprenticeship programs in the 2nd quarter following the program year in which they left postsecondary education (i.e., unduplicated placement status for CTE concentrators who graduated by June 30, 2007 would be assessed between October 1, 2007 and December 31, 2007).

Denominator: Number of CTE concentrators who left postsecondary education during the reporting year

Of the 3 graduates from this year, one is working full time with the USFS, another part-time with the USFS and a student at UH Hilo, and the third is a full-time student at UHH. The Performance Measures are fairly straight forward showing our 3 Hawaiian graduates with 5 total degrees and certificates and the two students who have transferred up to UHH. However, the zero number of STEM degrees is fallacious and has hopefully been rectified by the UH system, as the TEAM degree has been designated as a STEM program by the BOR since 2002.

What else is relevant to understanding the program's data? Describe any trends, internal/external factors, strengths and/or challenge that can help the reader understand the program's data for the three years under review that are not discussed above.

The forestry and natural resource management sectors have been steadily growing over the past 10 years and in particular in the last 3 years. Most of this increase has arisen from efforts to control the spread of invasive plant species such as albizia, insect pests such as little fire ants, and diseases such as zika, rat-

lung worm disease, and rapid ohi`a death (ROD). Our graduates are in high demand to work as technicians with control programs, and several are employed by agencies while they are in school. In addition to these pest issues, the bio-fuel sector has been growing with the subsequent need to propagate new fuel wood plantations. These new developments join the pool of traditional forestry employment to protect endangered species and ecosystems and grow commercial timber and agro-forestry products.

PROGRAM ACTIVITIES

Report and discuss all major actions and activities that occurred in the program during the 3-year review period, including the program's meaningful accomplishments and successes.
Also discuss the challenges or obstacles the program faced in supporting student success and explain what the program has done to address those challenges.
For example, discuss:
- Changes to the program's curriculum due to course additions, deletions, modifications (CRC, Fast Track, GE-designations), and re-sequencing;
- New certificates/degrees;
- Personnel and/or position additions and/or losses;
- Other changes to the program's operations or services to students

- Program director on sabbatical for academic year 2015
- Initiated a program modification to add new math and speech course option and to include a special topics course, which was approved by the CRC and Senate
- Initiated a "Culturally Based Resource Management" certificate of competence, which still needs some amendments to be made to the TEAM program before it is offered.
- Supervised 3 student workers to assist with the greenhouse, agro-forest garden demonstration site funded by USDA grant. A fourth student worker worked as an office assistant fall 2016 until spring 2017, but was not replaced after graduation due to lack of funds.
- Submitted 3 proposals to the USDA Alaska Native – Native Hawaii Agriculture grant (2015, 2016 and 2017) all of which were funded to support TEAM, AG, and HWST agricultural projects.
- Coordinated 24 internships for TEAM, AG, and HWST students with employers, most of which were funded by USDS ANNH stipends.
- Three memorandums of agreement were established for 6 TEAM students to participate with the following USFS work study projects: Rapid Ohi`a Death, Keaukaha Military Reserve Hybrid Forest Restoration, and Mamane Fertilization Study.

Contributions to the College

Discuss how the program aligns with and supports the College's institutional effectiveness and helps the Kauhale achieve our shared goals by describing how the program contributes to the achievement of our Mission, Vision and Institutional Learning Outcomes.

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.

http://uhcc.hawaii.edu/OVPCC/strategic_planning/mission.php

VISION: Our Kauhale of lifelong learners will be productive and engaged citizens capable of meeting the complex challenges of our island and global communities.

The TEAM program is aligned with the HawCC mission statement as we teach students about our natural environment and how best to manage forest resources. The program also requires internship experience with potential employers to enhance workforce readiness. In addition, the program coordinates the USDA Alaska Native-Native Hawaiian Agricultural grant that brought in approximately $330,000 USD to support agricultural projects for the TEAM, AG, and HWST programs.

As for the HawCC vision, the TEAM program provides lifelong learning skills such as how to grow food in agro-forestry systems, how to process and market these products, and how to sustainably manage forest ecosystems.

ILO #1: Communicate effectively in a variety of situations.

TEAM students are required to take a speech class and an internship class where they must make a formal presentation of their experience. In addition, they are asked to communicate in both written and verbal formats in all of their program classes.

ILO #2: Utilize critical thinking to solve problems and make informed decisions.

The TEAM program stresses critical thinking in most of the program courses. From courses in Agroforestry (AG 175) where students design their own planting systems to Forest Ecosystem Management (AG 291) where students submit detailed forest management plans. In these examples and other assignments, they deal with real situations to come up with the best solutions.

ILO # 3: Apply knowledge and skills to make contributions to community that are respectful of the indigenous people and culture of Hawai'i island, as well as other cultures of the world.

TEAM students learn about their natural environment, the biota that inhabits it, and how they interact with the physical components. They learn both scientific and indigenous terms to describe the various species and are exposed to both western and traditional concepts of ecological knowledge. This provides the learners with the foundations of becoming konohiki for their areas of land management or other kuleana.

ILO #4: Utilize quality comprehensive services and resources in the on-going pursuit of educational and career excellence.

Our students have selected a major that challenges them to learn about the management of their natural resources and provides them with life-long skills that will help them grow food and obtain other resources in a sustainable way. As part of their course work they are exposed to many natural resource management activities and diverse conservation agencies. Many also participate with conferences where they can develop further connections.

ILO #5: Produce and perpetuate safe, healthy learning and professional environments that are respectful of social and individual diversity.

Compliance with the student conduct code and safety practices are strictly enforced in all TEAM courses. Assignments are designed to reflect professional activities as much as possible

ILO #6: Contribute to sustainable environmental practices for personal and community well-being.

The subject material of all of our program courses revolves around sustainable management practices in forest and farm environments. This basis promotes both personal and community wellbeing by creating healthy environments to live in.

Learning-Outcomes Assessments
For assessment resources and PDF copies of all submitted assessment reports from the program during the 3-year review period, please see the [Assessment Reports Archive](#).

X	**The program faculty/staff have reviewed the program record on Kuali KSCM and hereby affirm that all information, including all program learning outcomes (PLOs), are correct.**
	The program faculty/staff have reviewed the program record on Kuali KSCM and have found that all or some information is incorrect and hereby affirm that the program will submit proposal(s) for revision(s), as appropriate.

Kuali KSCM: https://hawaii.kuali.co/cm/#/courses

If the program's information on Kuali KSCM needs revision (for example, program description, entry or completion requirements, PLOs), program faculty may propose revision through the Curriculum Review Committee or Fast Track processes, as appropriate. Both types of revision proposals may be submitted via Kuali.

Program Learning Outcomes (PLOs)

List the Program Learning Outcomes (PLOs) as recorded on Kuali KSCM.

1. Apply basic ecosystem concepts to natural resource management
2. Use an understanding of general scientific concepts in design of forestry systems.
3. Use knowledge of applicable laws and regulations to make decisions about managing ecosystems
4. Apply effective interpersonal and communication skills
5. Recognize, collect, and interpret field data
6. Apply effective management practices to commercial or conservation efforts

Discuss the program's successes and challenges in helping program majors achieve its overall Program Learning Outcomes (PLOs).
Include a summary discussion of the results of any PLO assessments voluntarily undertaken by the program's faculty.

The TEAM program has been mostly successful in helping students achieve the program learning outcomes. This is evident by how well students do in program courses. The vast majority during the last 3 years either met these objectives or exceeded them. Occasionally, students will not meet expectations and this is almost always due to non-completion of assignments.

Unlike most of the PLOs, which are emphasized in all TEAM courses, PLO 3 Use knowledge of applicable laws and regulations…" is only applicable to AG 291 "Forest Ecosystem Management." This unique PLO makes it difficult to assess, and we are thinking of rewording it to "use knowledge of social constraints" instead of "laws and regulations," which would allow it to be applied to other courses.

Course Learning Outcomes (CLOs)

List all program courses (alpha/#/title) that were assessed during the 3-year review period.
AG 275 Forest Pest Management
AG 275 L Forest Pest Management Lab

Discuss and summarize the overall results of course assessments conducted during the 3-year review period, focusing on students' achievement of Course Learning Outcomes (CLOs). Describe how the program's faculty/staff used course assessment results to plan for and implement improvements in student learning, and analyze the effects on students' learning of implementing those improvements.

The following CLOs were assessed for AG 275 in Spring 2017:

CLO 1 Define pest management, especially as it pertains to forest management – aligned with PLO 1

CLO 2 Describe multiple methods of natural and chemical pest control – aligned with PLO 6

CLO 3 Describe multiple species of forest pests – aligned with PLO 1

The assessment of these CLOs showed that 75% of the artifacts met expectations, which is better than the goal of 70%.

The same result was obtained for the lab section which had the same CLOs.

New improvements have not been implemented as the course will not be taught until spring 2019.

PART II: RESOURCES INVENTORY

Describe and discuss the program's current resources and resource needs.

Describe the status of the following faculty/staff program resources:	
Adequate Academic Support Resources (Library, tutoring, learning and testing facilities).	All good
Adequate Student Support Services (academic advising, counseling, career guidance).	All good
Safe workplace.	Good
Adequate and up-to-date computers and software (for program needs).	Yes, the college maintains the software for desktops in the computer and for faculty offices. However we have had to purchase extra laptops using USDA funds for faculty and student use. This grant has also allowed the program to purchase GIS software.
Adequate computer access to allow faculty to do their jobs.	Yes, although the USDA purchase of laptops helps when faculty have to work at home or when traveling.
Adequate training in computer technology (applications, operating systems, hardware, etc.).	Yes
Adequate training in audiovisual technology (projectors, ELMOs, polycom, etc.).	Yes, Neal and Joe are very helpful if anything goes wrong.

Adequate training in distance learning course development and management (Laulima, etc.).	Yes

Resource Category	Resources the program needs to operate effectively:	Resources the program already has:	What is the program's resource gap?
A. **Personnel**			
1) **Positions (Functions)**	1 PT office assistant, 3 PT greenhouse & garden student workers	3 PT greenhouse & garden student workers	1 PT office assistant
2) **Professional Development**	Kuali, RCUH, and superquote financial training		
B. **Operating Resources**			
1) **Supplies**	Greenhouse, farm, forest, office, and computer	Greenhouse, farm, forest, office, and computer	
2) **Contracts**	N/A		
3) **Equipment**	Van and truck, tractors, attachments greenhouse	Van and truck, tractors, attachments greenhouse	Support to maintain and repair vehicles and other types of equipment
4) **Space and Facilities**	Two classrooms, (wet lab and computer)	Two classrooms, (wet lab and computer)	

	greenhouse and two offices	greenhouse and two offices	
C. **Technology**			
1) **Hardware**	16 lab desktop computers, 3 instructor desktops 3 student laptops 2 faculty laptops	16 lab desktop computers, 3 instructor desktops 3 student laptops 2 faculty laptops	
2) **Apps or Software**	Arc-GIS, Office SPSS, Photoshop, website builder	Arc-GIS, Office	SPSS, Photoshop, Dream weaver, (website builder)
3) **Tech Support**	Assistance with software download and computer repair	Assistance with software download and computer repair	
4) **Tech-related Professional Development**	GIS training	GIS training	
5) **Tech labs / facilities**	Computer lab with GIS software / greenhouse	Computer lab with GIS software / greenhouse	

PART III: 3-YEAR ACTION PLAN & RESOURCE ALLOCATIONS

Provide a detailed narrative discussion of the program's overall 3-Year Action Plan to improve student success for AY18, AY19 and AY20. This 3-Year Action Plan should be based on analysis of the Program's 3-year data trends for student achievement and the overall results of course and program assessments of student learning conducted during the 3-year review period. This 3-year Action Plan must identify the program's specific goals and objectives for the next three years, and must include annual benchmarks and timelines to achieve each goal.
Note: "Budget asks" to accomplish the program's Action Plan may be included in the Action Items below.

The TEAM program action plan is to improve in three areas: first, to increase recruitment into the program; second, to improve program efficiency so that more students transfer to a 4-year school; and third, increase job placement.

AY 2018
Recruitment. TEAM faculty and staff will coordinate with area high schools to inform them about the program. A new student worker will be hired to specialize in outreach coordination. Our web page will be updated and new pictures and slideshows prepared for career fairs and class presentations.

Program efficiency. Efficiency will be enhanced by making modifications that will allow TEAM courses to be available to other programs such as AG, HWST, and Natural Science. It is hoped that this will enhance students' learning experience and increase classroom fill rates. Courses in the TEAM program will be modified so that they will have better articulation with UH Hilo and UH Manoa.

Placement. The TEAM program faculty will work with the advisory board to keep up to date with changes in the workforce and modify curriculum and internship opportunities as necessary. The program will also with work with other agricultural and forestry related committees in the community and attend agriculture and conservation conferences to seek out new career pathways.

AY 2019
Evaluate changes in program enrollment, efficiency, and placement and emphasize areas that need more support.

AY 2020
If courses remain low-enrolled, the program will considered expanding marketing strategies to students outside of Hawaii county and possibly combining forces with other small programs such as Natural Science and offering courses every other year to meet enrollment quotas.

Provide a detailed discussion of how the program's 3-year Action Plan will help the College achieve our Initiatives in the *Strategic Directions 2015-2021* plan:

http://hawaii.hawaii.edu/sites/default/files/docs/strategic-plan/hawcc-strategic-directions-2015-2021.pdf

The action plan will address HGI strategy 1 by strengthening K-12 college readiness by letting high school agricultural instructors and counselors know about the TEAM program and its requirements. It will also support HGI strategy 2 by establishing degree pathways that will include transferring to other 2-yr. and 4-yr. institutions. The TEAM program may also consider rescheduling courses to facilitate degree completion. The action plan will also align curricula with community and workforce needs as outlined in HGI strategy 3, and the TEAM program will continue to maintain its record of graduate academic transfer and employment. Finally, the TEAM program will continue to support Native Hawaiian students and those students of low income by providing them with access to scholarships and tuition support when available. The program will continue to extend courses to the West Hawaii campus as recommended by HGI strategy 4.

ACTION ITEMS to ACCOMPLISH the ACTION PLAN

Provide a detailed description and discussion of <u>each Action Item</u> that the program will undertake to accomplish its 3-Year Action Plan.

<u>Action Item 1:</u>

- **What specific strategies, tactics, initiatives, innovations and/or activities will the program implement to accomplish one or more of the goals described in the 3-year Action Plan above?**

Recruitment – hire new APT or student worker to coordinate with High School forestry clubs to get them prepared with math and English so that they complete the TEAM program in 2 years. APT and students workers visit school career fairs and set up booths at community events.

- **How will implementing this Action Item help lead to improvements in student learning and their attainment of the program's learning outcomes (PLOs) over the next 3 years?**

If students can test into program courses without having to take remedial classes then they will be able to graduate faster. Increased recruitment from local high schools will also increase enrollment in program courses and ultimately increase graduation rates.

- *Budget & Resource Asks*: **Describe in detail any additional or reallocated resources that will be needed to accomplish this Action Item.** *If no additional or reallocated resources are required to accomplish this Action Item, enter "N/A" below.*
- **Provide justification why this resource is necessary to accomplish this Action Item and the program's Action Plan.**
- **Include the total cost and timeline for purchase or re-allocation.**

.05 FT APT to help with recruitment and program administration, this would cost approximately $20,000 per year, this action is justified as the TEAM program has brought in over a million dollars of USDA funds over the last 10 years with 40 % overhead and never had APT support.

Action Item 2:

- **What specific strategies, tactics, initiatives, innovations and/or activities will the program implement to accomplish one or more of the goals described in the 3-year Action Plan above?**

Retention and Transfer
Improve articulation with UHH and UHM by changing course alphas and numbers so that they better align 100 and 200 level courses. Modify program to include higher level chemistry that will help students complete a 2+2 four-year degree.

Placement
Work with existing employers such as the USFS, NPS, DLNR, Forest Solutions and Nature Conservancy to expand employment opportunities for graduates. This will be done in advisory meeting and internship program. Work to create new relationships with the bio-fuel and

other plantation forestry sectors, including small entrepreneurial enterprises.

- **How will implementing this Action Item help lead to improvements in student learning and their attainment of the program's learning outcomes (PLOs) over the next 3 years?**

By improving articulation with UHH and UHM our students will be better able to transfer to those and other 4-year institutions and be able to complete a bachelor's degree in less time.

Also, by working with the advisory board members and potential employers, the program will be able to modify curricula to better meet workforce needs

- *Budget & Resource Asks*: **Describe in detail any additional or reallocated resources that will be needed to accomplish this Action Item.** *If no additional or reallocated resources are required to accomplish this Action Item, enter "N/A" below.*
- **Provide justification why this resource is necessary to accomplish this Action Item and the program's Action Plan.**
- **Include the total cost and timeline for purchase or re-allocation.**

N/A

Action Item 3:

- **What specific strategies, tactics, initiatives, innovations and/or activities will the program implement to accomplish one or more of the goals described in the 3-year Action Plan above?**
  Maintain equipment so that they function in a safe and efficient manner to teach course concepts. This primarily includes maintaining program vehicles and tractors, which is part of the USDA agreement when they purchase the equipment.

- **How will implementing this Action Item help lead to improvements in student learning and their attainment of the program's learning outcomes (PLOs) over the next 3 years?**

Vehicle repair and maintenance are important for safe transportation on field trips, which are an essential component of forestry and agricultural education. If the vehicles are not able to safely operate, then field trips have to be cancelled.

- *Budget & Resource Asks*: **Describe in detail any additional or reallocated resources that will be needed to accomplish this Action Item.** *If no additional or reallocated resources are required to accomplish this Action Item, enter "N/A" below.*
- **Provide justification why this resource is necessary to accomplish this Action Item and the program's Action Plan.**
- **Include the total cost and timeline for purchase or re.-allocation.**

A budget request of $5,000 per year is requested to maintain a fleet of 2 vans and one truck. This amount is based on previous calculations that were made to justify RTRF annual allocation for the same number of vehicles from 2007 to 2010.

BUDGET & RESOURCE ASKS

For <u>each</u> budget-or-resource-ask detailed in the Action Items above, answer the following questions:	
What are the implications or consequences for the program if this request is not funded?	We will experience a back log of program administrative duties if we do not have an APT. Vehicles will be unsafe or not operable if they are not properly maintained.
How can the program build, create, or develop the needed resources within its existing capacity?	Hire student workers who are capable office workers and mechanics.
Can other resources be re-purposed to accommodate this need?	Work with the college automotive programs to maintain and repair the vehicles.
Are there other sources to fund this need, such as grants, community partnerships, etc.?	At this point, funds are so low in the USDA budget that the 10K allocation for an APT had to be used to pay for an instructor for a low-enrolled course. USDA funds are available to purchase vehicles but are not allowed for repair. However, the 40% indirect rate that goes to the University is intended for such use as overhead and repairs.

Can this need be deferred? **If so, for how long?** **What are the consequences if deferred?**	Without an APT we will have lower rate of efficiency and program health. Deferment of vehicle maintenance will require the program to request funds from the Math and Natural science department, which currently has a budget shortage. It is difficult to know how long the vehicles will operate before a repair is needed; on the average a repair is needed approximately every two months and tune-ups are required twice per year. If the vehicles are not maintained in good order field trips will have to be cancelled.

Hawaii Community College
2015 Instructional Annual Report of Program Data
Trop Forest Ecosystem & Agroforestry Mgt

Part I: Program Quantitative Indicators

Overall Program Health: Cautionary

Majors Included: TEAM   Program CIP: 03.0599

Demand Indicators		Program Year			Demand Health Call
		12-13	13-14	14-15	
1	New & Replacement Positions (State)	10	10	9	
2	*New & Replacement Positions (County Prorated)	2	2	1	
3	*Number of Majors	35	32	25	
3a	Number of Majors Native Hawaiian	21	14	16	
3b	Fall Full-Time	67%	53%	55%	
3c	Fall Part-Time	33%	47%	45%	
3d	Fall Part-Time who are Full-Time in System	0%	0%	0%	
3e	Spring Full-Time	59%	62%	57%	Unhealthy
3f	Spring Part-Time	41%	38%	43%	
3g	Spring Part-Time who are Full-Time in System	0%	0%	0%	
4	SSH Program Majors in Program Classes	218	150	162	
5	SSH Non-Majors in Program Classes	21	6	9	
6	SSH in All Program Classes	239	156	171	
7	FTE Enrollment in Program Classes	8	5	6	
8	Total Number of Classes Taught	16	13	14	

Efficiency Indicators		Program Year			Efficiency Health Call
		12-13	13-14	14-15	
9	Average Class Size	7.4	5.1	6	
10	*Fill Rate	42.7%	33.8%	38%	
11	FTE BOR Appointed Faculty	1	1	1	
12	*Majors to FTE BOR Appointed Faculty	35	32	25	
13	Majors to Analytic FTE Faculty	28.6	30.9	23.3	
13a	Analytic FTE Faculty	1.2	1.0	1.1	
14	Overall Program Budget Allocation	$207,032	$196,889	Not Reported	Cautionary
14a	General Funded Budget Allocation	$76,750	$100,215	Not Reported	
14b	Special/Federal Budget Allocation	$123,620	$95,196	Not Reported	
14c	Tuition and Fees	$6,662	$1,478	Not Reported	
15	Cost per SSH	$866	$1,262	Not Reported	
16	Number of Low-Enrolled (<10) Classes	12	12	12	

*Data element used in health call calculation   Last Updated: October 7, 2015

Effectiveness Indicators		Program Year			Effectiveness Health Call
		12-13	13-14	14-15	
17	Successful Completion (Equivalent C or Higher)	78%	88%	63%	
18	Withdrawals (Grade = W)	1	2	0	Cautionary
19	*Persistence Fall to Spring	66.6%	59.4%	57.1%	

19a	Persistence Fall to Fall	48.5%	37.1%	42.3%
20	*Unduplicated Degrees/Certificates Awarded	3	4	6
20a	Degrees Awarded	3	4	4
20b	Certificates of Achievement Awarded	0	2	3
20c	Advanced Professional Certificates Awarded	0	0	0
20d	Other Certificates Awarded	0	0	0
21	External Licensing Exams Passed	Not Reported	Not Reported	Not Reported
22	Transfers to UH 4-yr	0	3	3
22a	Transfers with credential from program	0	2	2
22b	Transfers without credential from program	0	1	1

Distance Education: Completely On-line Classes	Program Year		
	12-13	13-14	14-15
23 Number of Distance Education Classes Taught	0	0	0
24 Enrollments Distance Education Classes	N/A	N/A	N/A
25 Fill Rate	N/A	N/A	N/A
26 Successful Completion (Equivalent C or Higher)	N/A	N/A	N/A
27 Withdrawals (Grade = W)	N/A	N/A	N/A
28 Persistence (Fall to Spring Not Limited to Distance Education)	N/A	N/A	N/A

Perkins IV Core Indicators 2013-2014	Goal	Actual	Met
29 1P1 Technical Skills Attainment	91.00	100.00	Met
30 2P1 Completion	47.00	37.50	Not Met
31 3P1 Student Retention or Transfer	75.21	75.00	Not Met
32 4P1 Student Placement	68.92	0.00	Not Met
33 5P1 Nontraditional Participation	17.50	40.00	Met
34 5P2 Nontraditional Completion	16.00	20.00	Met

Performance Funding	Program Year		
	12-13	13-14	14-15
35 Number of Degrees and Certificates	3	6	7
36 Number of Degrees and Certificates Native Hawaiian	2	1	3
37 Number of Degrees and Certificates STEM	Not STEM	Not STEM	Not STEM
38 Number of Pell Recipients	29	23	15
39 Number of Transfers to UH 4-yr	0	3	3

*Data element used in health call calculation   Last Updated: October 7, 2015

Hawaii Community College
2016 Instructional Annual Report of Program Data
Trop Forest Ecosystem & Agroforestry Mgt

Part I: Program Quantitative Indicators

Overall Program Health: Cautionary

Majors Included: TEAM Program CIP: 03.0101

Demand Indicators		Program Year			Demand Health Call
		13-14	14-15	15-16	
1	New & Replacement Positions (State)	10	9	9	Unhealthy
2	*New & Replacement Positions (County Prorated)	2	1	2	
3	*Number of Majors	32	25	26	
3a	Number of Majors Native Hawaiian	14	16	15	
3b	Fall Full-Time	53%	55%	50%	
3c	Fall Part-Time	47%	45%	50%	
3d	Fall Part-Time who are Full-Time in System	0%	0%	0%	
3e	Spring Full-Time	62%	57%	60%	
3f	Spring Part-Time	38%	43%	40%	
3g	Spring Part-Time who are Full-Time in System	0%	0%	0%	
4	SSH Program Majors in Program Classes	150	162	140	
5	SSH Non-Majors in Program Classes	6	9	82	
6	SSH in All Program Classes	156	171	222	
7	FTE Enrollment in Program Classes	5	6	7	
8	Total Number of Classes Taught	13	14	14	

Efficiency Indicators		Program Year			Efficiency Health Call
		13-14	14-15	15-16	
9	Average Class Size	5.1	6	6.4	Cautionary
10	*Fill Rate	33.8%	38%	40%	
11	FTE BOR Appointed Faculty	1	1	1	
12	*Majors to FTE BOR Appointed Faculty	32	25	25.5	
13	Majors to Analytic FTE Faculty	30.9	23.3	21.5	
13a	Analytic FTE Faculty	1.0	1.1	1.2	
14	Overall Program Budget Allocation	$196,889	Not Reported	Not Yet Reported	
14a	General Funded Budget Allocation	$100,215	Not Reported	Not Yet Reported	
14b	Special/Federal Budget Allocation	$95,196	Not Reported	Not Yet Reported	
14c	Tuition and Fees	$1,478	Not Reported	Not Yet Reported	
15	Cost per SSH	$1,262	Not Reported	Not Yet Reported	
16	Number of Low-Enrolled (<10) Classes	12	12	10	

*Data element used in health call calculation Last Updated: January 18, 2017

Effectiveness Indicators		Program Year			Effectiveness Health Call
		13-14	14-15	15-16	
17	Successful Completion (Equivalent C or Higher)	88%	63%	93%	Healthy
18	Withdrawals (Grade = W)	2	0	1	
19	*Persistence Fall to Spring	59.4%	57.1%	72%	
19a	Persistence Fall to Fall	37.1%	42.3%	50%	
20	*Unduplicated Degrees/Certificates Awarded	4	6	7	
20a	Degrees Awarded	4	4	4	
20b	Certificates of Achievement Awarded	2	3	6	
20c	Advanced Professional Certificates Awarded	0	0	0	
20d	Other Certificates Awarded	0	0	0	
21	External Licensing Exams Passed	Not Reported	Not Reported	N/A	
22	Transfers to UH 4-yr	3	3	0	
22a	Transfers with credential from program	2	2	0	
22b	Transfers without credential from program	1	1	0	

Distance Education: Completely On-line Classes		Program Year			
		13-14	14-15	15-16	
23	Number of Distance Education Classes Taught	0	0	0	
24	Enrollments Distance Education Classes	N/A	N/A	N/A	
25	Fill Rate	N/A	N/A	N/A	
26	Successful Completion (Equivalent C or Higher)	N/A	N/A	N/A	
27	Withdrawals (Grade = W)	N/A	N/A	N/A	
28	Persistence (Fall to Spring Not Limited to Distance Education)	N/A	N/A	N/A	

Perkins IV Core Indicators 2014-2015		Goal	Actual	Met	
29	1P1 Technical Skills Attainment	91.00	100.00	Met	
30	2P1 Completion	50.30	60.00	Met	
31	3P1 Student Retention or Transfer	76.72	77.78	Met	
32	4P1 Student Placement	69.00	37.50	Not Met	
33	5P1 Nontraditional Participation	19.69	32.14	Met	
34	5P2 Nontraditional Completion	19.36	20.00	Met	

Performance Measures		Program Year			
		13-14	14-15	15-16	
35	Number of Degrees and Certificates	6	7	10	
36	Number of Degrees and Certificates Native Hawaiian	1	3	4	
37	Number of Degrees and Certificates STEM	6	0	0	
38	Number of Pell Recipients	23	15	10	
39	Number of Transfers to UH 4-yr	3	3	0	

*Data element used in health call calculation   **Last Updated: January 18, 2017**

Hawaii Community College
2017 Instructional Annual Report of Program Data
Trop Forest Ecosystem & Agroforestry Mgt

Part I: Program Quantitative Indicators

Overall Program Health: Cautionary

Majors Included: TEAM   Program CIP: 03.0101

	Demand Indicators	Program Year			Demand Health Call
		14-15	15-16	16-17	
1	New & Replacement Positions (State)	9	9	7	
2	*New & Replacement Positions (County Prorated)	1	2	2	
3	Number of Majors	25	26	24	
3a	Number of Majors Native Hawaiian	16	15	14	
3b	Fall Full-Time	55%	50%	46%	
3c	Fall Part-Time	45%	50%	54%	
3d	Fall Part-Time who are Full-Time in System	0%	0%	0%	Cautionary
3e	Spring Full-Time	57%	60%	53%	
3f	Spring Part-Time	43%	40%	47%	
3g	Spring Part-Time who are Full-Time in System	0%	0%	0%	
4	SSH Program Majors in Program Classes	162	140	156	
5	SSH Non-Majors in Program Classes	9	82	58	
6	SSH in All Program Classes	171	222	214	
7	FTE Enrollment in Program Classes	6	7	7	
8	Total Number of Classes Taught	14	14	13	

	Efficiency Indicators	Program Year			Efficiency Health Call
		14-15	15-16	16-17	
9	Average Class Size	6	6.4	6.7	
10	*Fill Rate	38%	40%	42.4%	
11	FTE BOR Appointed Faculty	1	1	1	
12	*Majors to FTE BOR Appointed Faculty	25	25.5	23.5	
13	Majors to Analytic FTE Faculty	23.3	21.5	21.2	
13a	Analytic FTE Faculty	1.1	1.2	1.1	
14	Overall Program Budget Allocation	Not Reported	Not Yet Reported	$110,962	
14a	General Funded Budget Allocation	Not Reported	Not Yet Reported	$109,870	Cautionary
14b	Special/Federal Budget Allocation	Not Reported	Not Yet Reported	$0	
14c	Tuition and Fees	Not Reported	Not Yet Reported	$1,092	
15	Cost per SSH	Not Reported	Not Yet Reported	$519	
16	Number of Low-Enrolled (<10) Classes	12	10	12	

*Data element used in health call calculation   Last Updated: October 29, 2017

Effectiveness Indicators		Program Year			Effectiveness Health Call
		14-15	15-16	16-17	
17	Successful Completion (Equivalent C or Higher)	63%	93%	82%	
18	Withdrawals (Grade = W)	0	1	1	
19	*Persistence Fall to Spring	57.1%	72%	66.6%	
19a	Persistence Fall to Fall	42.3%	50%	46.1%	
20	*Unduplicated Degrees/Certificates Awarded	6	7	4	
20a	Degrees Awarded	4	4	3	
20b	Certificates of Achievement Awarded	3	6	2	Cautionary
20c	Advanced Professional Certificates Awarded	0	0	0	
20d	Other Certificates Awarded	0	0	0	
21	External Licensing Exams Passed	Not Reported	N/A	N/A	
22	Transfers to UH 4-yr	3	0	2	
22a	Transfers with credential from program	2	0	2	
22b	Transfers without credential from program	1	0	0	

Distance Education: Completely On-line Classes		Program Year			
		14-15	15-16	16-17	
23	Number of Distance Education Classes Taught	0	0	0	
24	Enrollments Distance Education Classes	N/A	N/A	N/A	
25	Fill Rate	N/A	N/A	N/A	
26	Successful Completion (Equivalent C or Higher)	N/A	N/A	N/A	
27	Withdrawals (Grade = W)	N/A	N/A	N/A	
28	Persistence (Fall to Spring Not Limited to Distance Education)	N/A	N/A	N/A	

Perkins IV Core Indicators 2015-2016		Goal	Actual	Met	
29	1P1 Technical Skills Attainment	92.00	100.00	Met	
30	2P1 Completion	51.00	75.00	Met	
31	3P1 Student Retention or Transfer	81.00	72.73	Not Met	
32	4P1 Student Placement	63.87	60.00	Not Met	
33	5P1 Nontraditional Participation	22.00	29.17	Met	
34	5P2 Nontraditional Completion	22.00	50.00	Met	

Performance Measures		Program Year			
		14-15	15-16	16-17	
35	Number of Degrees and Certificates	7	10	5	
36	Number of Degrees and Certificates Native Hawaiian	3	4	5	
37	Number of Degrees and Certificates STEM	0	0	0	
38	Number of Pell Recipients[1]	15	10	2	
39	Number of Transfers to UH 4-yr	3	0	2	

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[1]PY 16-17; Pell recipients graduates not majors