HAWAI'I COMMUNITY COLLEGE ANNUAL INSTRUCTIONAL PROGRAM REVIEW TEMPLATE

Tropical Ecosystem and Agroforestry Management

November 27, 2013

July 1, 2012 to June 30, 2013

Initiator: Writer(s): Pamela Y. Scheffler Orlo C. Steele

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

available to the college and community at large to enhance communication and public accountability.

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

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

Program Description (Use the official description from catalog then give more in depth explanation of what the program does, who it serves and generally describe it's accomplishments) Students learn to actively manage Hawai'i'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.

Part I: Quantitative Indicators

NO ENTRY

Part II: Analysis of the Program

Alignment with College Mission and ILOs

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

College's mission:

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

Program Mission:

Students learn to actively manage Hawai'i's native forest

ecosystems, grow native plants, establish agroforestry operations,

Annual Program Review 2013

use Global Positioning Systems (GPS), and Geographic

Information Systems (GIS). Internships give students on-the-job

training with potential employers.

Describe how this program supports the College's mission.

We actively challenge our students to learn about the unique factors affecting Hawaii's ecosystems and agriculture and challenge them to meet high standards before graduation.

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

ILO 1: Our graduates will be able to communicate effectively in a variety of situations. *Describe how the Program supports ILO1:*

Our classes expose the students to a broad range of communication and scenarios. Most classes require student oral presentations and/or writing assignments. Students are writing everything from short essays to lab reports and multi-page research and/or proposals.

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

Describe how this Program supports ILO 2:

The majority of the courses required for the TEAM major also require a laboratory class/section to be taken simultaneously. Through these lab and field experiences, our students learn to gather, evaulate and analyze information related to the natural world and the life sciences.

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

The majority of our courses are taught specifically for the Hawaiian environment. We feel that it is impossible to teach about the natural environment without teaching the human relationship to it; here that includes a knowledge and respect of Hawaiian ideas and values. We also require a Hawaiian Studies course (HWST 105) for all of our majors that further bridges the gap between Western science and Hawaiian values.

Annual Report of Program Data (ARPD)

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

Overall Health-- Cautionary

Demand -- Unhealthy

The TEAM Program has an overall health rating of "Cautionary." However, we are concerned about some of the Health Calls and the data on which they are based. Our Demand Health Call is rated as "Unhealthy" due to the low level of new and replacement positions for State and County as reported in the ARPD data which were 10 and 2 positions respectively. During the Program year 09-10 our faculty worked with the VCAA to review the CIP/SOC codes used for our program and update them so that they accurately reflected the diversity of jobs available to graduates of our multi-disciplinary program. These efforts are reflected in the 10-11 data in which our program is deemed "Healthy" due to the realistic job numbers (117: State; 18: County). Unfortunately, in 11-12 the job data was once again changed and no longer represent the jobs available to our graduates at either the State or County level. The SSH of program majors in program classes is rising and may reflect some improvement due to increased efforts to remedy some of the problems faced by the Program.

Efficency -- Cautionary

Our Efficiency Health Call is "Cautionary" which is an improvement over last year's "Unhealthy" call. For the first year since the creation of the BOR appointed faculty position (2007), the position is considered in the data. In addition to the BOR appointed faculty member in the TEAM program, we have an additional FT Liberal Arts faculty member who teaches in the program, making the student load (35:1) somewhat less onerous than it sounds on paper. The fill rate for our classes is lower (43%) than we would like to see, unchanged since last year, and is one of the challenges faced by this program.

Effectiveness -- Cautionary

Our Effectiveness Health Call is "Cautionary." Seventy-eight percent of majors successfully completed their courses and the persistence from fall to spring was 67%. Only 3 students (<10% of declared majors) graduated during this year. All of these students found work in their field and did not transfer to a 4-year program.

Distance Education: Completely On-Line Classes

If applicable, based on the data on Distance Education (DE) from this Program's ARPD, analyze this program's strengths and weaknesses in terms of its DE offerings. Include future plans (i.e. will increase/decrease offerings; CARP 100 was not effective online, will try CARP 101 instead; increase professional development for faculty). none offered

Perkins IV Core Indicators

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

Our students have a high successful completion rate (78%) but only 29% meet the Perkins 2P1 Completion. We have improved our Perkins Placement rate (4P1) to 81%, well-above our goal, and remain strong in attracting non-traditional (female) students (5P1; approximately 41% of our students) and graduating them (5P1; 40%). Thus, we have have exceeded both 5P1 and 5P2 Perkins goals (167% of 5P1 and 141% of 5P2). We are have also exceeded the 1P1 goal with 100% of our students reaching Technical Skills Attainment. Our challenge with the Perkins goals this year stems from the low number of students who graduated, leading to missing our 2P1 and 3P1 Completion and Retention and Transfer goals for the first time in years.

Performance Funding

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

Previous Program Actions

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

Progress Evaluation
SS
yet analyzed
to meet with Board. Have increased meetings from
o twice/year
rogress
SS
I. 11 internships arranged for Summer 2013.
i. 11 internships analigeu for Summer 2015.
rlily suspended due to manpower constraints

Annual Program Review 2013

club throughout Hawai'i Island	
Assess PLOs	Regular assessment as per 5-year plan
Work with local organizations to provide service learning opportunities	Continual. Service Learning opportunites provided through TEAM or HawCC Service Learning on a regular basis: 2-5 per month

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

1. Faculty member on sabbatical
2.
3.

Analysis of Strengths and Weaknesses

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

Strengths	Using supporting evidence, describe why this is a strength		
S1. • Internships provide real world experience for TEAM students.	This past year, TEAM faculty coordinated internships for 11 students with local natural resource management agencies In the past, many of our graduates have gone on to obtain employment with the agency they interned with and many will obtain p/t employment with their internship agency during their tenure in the program		
S2. • The program has a strong relationship with its Advisory Board	We meet with our Advisory Board on a biannual basis (December and May) this strengthens the program and helps us to arrange internship opportunities for students.		
S3. • The Program has the financial support of the USDA Agricultural Technology Education and Incubator grant	The grant is used to purchase materials and supplies, employ student workers and provide training to program participants. It provides a much broader range of experiences and resources to our students than we could otherwise provide.		

Weaknesses	Using supporting evidence, describe why this is a Weakness
W1. • Under-prepared students that require remedial/developmental education prior to entering the program	As for many Hawaii CC programs, many of our entering students do not meet the requirements for taking College-level courses and are destined to spend 1-4 semesters

	taking remedial courses before beginning TEAM-required
	coursework. This reduces enrollment in program courses
	and leads to a poor graduate to major ratio
W2. • Laptops do not have enough	Teaching distance-ed to our West Hawaii students is
drive space and ram to adequately run	difficult because of lack of support staff and materials on
GIS software.	that campus. We try to provide our students with loaned
	laptops loaded with the GIS and other software necessary
	to take our courses but the age of the laptops is now a
	barrier to their usefulness. Faculty laptops also experience
	the same memory issues.
W3. • Lack of articulation agreement	Approximately half our graduating students intend to
with 4-year degrees at UHH	continue their studies and the other half enter the
	workplace directly. Although we once had an articulation
	agreement ready to sign with UHH CAFNRM, UHH changed
	their requirements before it was signed and the pathways
	were no longer valid. Because of the lack of an articulation
	agreeement, TEAM graduates have to spend a minimum of
	3 additional years when going from a Hawaii CC A.S. to a
	UHH B.S. or B.A. program

Trends and Other Factors

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

Part III: Action Plan

Goals and Planning

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

Program Action 1	ILO Alignment (select up to 3)	Ali	egic Plan gnment alignment; max 3)	UH System Collaboration
		Performance	Action Strategy	
1 IB B 2012	-	-	1 . 1 .	1 2012 10 14

Annual Program Review 2013

		Measure	
Graduation	ILO 1	A1.1	New Strategy
Graduation	ILO 1	A1.1	New Strategy
Graduation	ILO 1	A1.1	New Strategy

Link to Hawaii Community College Institutional Learning Outcomes Link to Hawai'i Community College Strategic Plan Link to Hawaii Community College Academic Master Plan

Narrative of New Strategy for Strategic Plan:

1.
2.
3.

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

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

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

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

Narrative of New Action Strategy for Strategic Plan:

1. 2.

3.

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

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

Activity	When will the activity take place

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

Narrative of New Strategy for Strategic Plan:

1.	
2.	
3.	

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

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

Activity	When will the activity take place

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

Perkin's Indicator	Action Plans	When will the activity take place
2P1	More emphasis on advising students	Already begun. Ongoing.
3P1	More emphasis on advising students	Already begun. Ongoing.
None		

Part IV: Resource Implications

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

Cost Item 1	Туре	Cost	Strategic Plan Alignment (select best alignment; max 3)		Academic Master Plan Alignment (select best alignment; max 3)	Strength	Weakness
				Action Strategy	Program Action from AMP (ie 4.3) or write "New Strategy"	From Part II above	From Part II above
Laptops	Equipmen	5* \$1700	A1.1	New Strategy	New Strategy	S 1	W2
			A1.1	New Strategy		None	None
			A1.1	New Strategy		None	None

Link to Hawaii Community College Institutional Learning Outcomes Link to Hawai'i Community College Strategic Plan Link to Hawaii Community College Academic Master Plan

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

Both faculty and students are using laptops that cannot support today's memory-intensive programs. Our West Hawaii students are especially disadvantaged because the programs needed for course success are not available on that side of the island and cannot be successfully run on the laptops we provide as loaners. Hilo-based students regularly borrow laptops in order to complete assignments when the computer facilities are being used by other departments and classes. They are also disadvantaged by the age of the laptops and the inability to run memory intensive programs. Faculty have trouble running programs when at meetings or working from off-campus. This will also allow students on their internships to have access to a loaner computer so that they can work on data analysis and report writing (for the AG 190V course) at home in the evenings.

Cost Item 2	Туре	Cost	Strategic Plan Alignment (select best alignment; max 3)		Academic Master Plan Alignment (select best alignment; max 3)	Strength	Weakness
				Action Strategy	Program Action from AMP (ie 4.3) or write "New Strategy"	From Part II above	From Part II above
Faculty Release Time			A1.1	New Strategy	27.7	None	W3
	Personnel	7,000	A1.1	New Strategy		None	None
			A1.1	New Strategy		None	None

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

TEAM faculty are primarily teachers with a 27-hour per year courseload. There is release time for working with Program and Grant related duties but those duties are sufficiently time intensive to leave little free time for working on an articulation agreement with the 4-year UH campuses. An additional 3-6 hours release time would allow a TEAM faculty member to prioritize the articulation with one or both of the campuses.

Cost Item 3	Туре	Cost	Strategic Plan Alignment (select best alignment; max 3)		Academic Master Plan Alignment (select best alignment; max 3)	Strength	Weakness
				Action Strategy	Program Action from AMP (ie 4.3) or write "New Strategy"	From Part II above	From Part II above
Jr. TEAM coordinator		\$150/w eek	A1.1	New Strategy	27.5	None	W1
	Personnel		A1.1	New Strategy		None	None
			A1.1	New Strategy		None	None

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

This would allow us to hire a student coordinator to work with Jr. TEAM club. The Jr. TEAM Club is a high school club that works as a recruiting and program promotion tool for TEAM. Many high schoolers do not know that the program exists and/or are unaware that opportunites exist for working with natural resources management. Having a student tasked with running this program will help us to recruit students into the program and interact with them while before they applly, hopefully encourageing them to put more effort into the courses they need to gain the pre-requisite skills for a college-level science degree.

Part V: Program Student Learning Outcomes

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

	Check	
	mark if	Program Student Learning Outcomes
	Assessed	I rogram Student Learning Outcomes
	this year	
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

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

Forest TEAM Program Advisory Board Meeting Minutes April 5th 2013

1. Call to order: Orlo Steele called to order at 2:52 pm

2. Roll Call: The following persons were in attendance: J.B. Friday (CTARH), Noe Punawai (PIPES), Paul Banko (NPS), Becky Ostertag (UHH), Jadine Navor (TEAM).

3. Reviewed minutes from Oct 12th 2012 meeting – approved with inclusions of last names for Rhonda Loh and Leila Kealoha.

4. Changes in membership: Bill Steiner has retired and the board recommended that Bruce Matthews the Interim Dean of UHH CAFRN Program

5. Program Update: Orlo

Fred Stone (former TEAM Director) is in Colorado recovering from an accident he suffered last Oct, but is doing much better and planning to return to Hawaii in May.

Graduate News: Molly Murphy, Kai Hiraoka and Ambrose Cantan currently in their 2nd year of working with the USFS Forest Inventory and Analysis (FIA)Project. Kai and Ambrose were recently sent to American Samoa to assist with their FIA.

Lori Bothwell and Taite Winthers-Barcelona working with SCEP program at USFS and attending UHH

Student workers: Same crew as last semester – Office assistant – Jade Navor, Greenhouse manager -Leiana Kekoa and Agroforestry Demonstration Site Assistants – Tisha Piilani-Pelanca and Cole Rogers. All good workers and busy getting ready for Earth Day. Leiana will graduate in Spring 13, so will need to look for a new greenhouse manager.

Bridge to Hope student worker – Beverly Medeiros – Outreach Assistant. Paid for by State of Hawaii DHS

Fall 2012 Interns with KMR lowland forest restoration project – Cole Rogers, Matt Kahoohanohano and Jason Warden worked with USFS and UHH (Becky Ostertag). Taite is still working on project. Jason had to leave Island to attend family matters in New York.

West Hawaii Campus – should we keep the program going? Only 2 students and it's expensive to hire lab instructors (currently Brian Kiyabu at Amy Greenwell has been employed by TEAM Program as casual hire). Things may improve as HawCC is currently screening for new tenure track science faculty to teach nursing courses and biology courses.

New Graduates: Only Leiana this year plus two Environmental Studies Certificates

Edward Bufil, (who is working with the National Park and getting paid) – could of graduated this semester but is waiting for Forestry Major at UHH CAFRN to become available.

J.B. - He shouldn't wait as it may be a while until the forestry major is ready. Noe – currently the Plant Science and Agroecology is the closest major available at UHH

USDA NIFA Grants:

FY 11-12 has - \$12,000 remaining mostly all for stipends

FY 12-13 just opened with \$105,000

Hawaiian Lifestyles (HLS) opted out of FY 12-13 as they restructure their program but will participate with the FY 13-14 proposal which was submitted in January for \$101K The AG and HLS programs were allocated approximately 12K each in this new proposal.

AG Professor, Chris Jacobsen - requested a BCS walk behind tractor with FY12-13 funds, and proposed funding for a walk behind lettuce harvester/cleaner for FY 13-14. HLS requested tuition support, stipends and travel funds for the new proposal.

J.B. - Jill Wagner- West Hawaii Kaloko NP has new seed cleaning machinery which can be used to process large batches of seeds, which we maybe should consider in future proposals. Also recommended a chipper to grind up compost to make our own potting mix.

Vehicles: The College has spent considerable funds with the up keep of TEAM and AG vehicles (3 vans, and 1 truck). Recent repairs have included new transmission for 4wd Chevy van, battery for Ford Truck and Starter for 2wd Chevy van.

J.B. – Recommends looking for funds to replace our aging fleet of vehicles with some new vans, as they now are over 10 years old and have had a lot of use. Are there Federal Funds to do this?

Orlo- the vans and truck were purchased with NSF ATE funds, we will look into the possibility of funding sources for replacement. The HawCC Math and Natural Science Dept. was able to purchase a 2wd 12 passenger van using G funds, which has helped when our vans are down.

J.B. - what TEAM courses are being offered this semester?

- AG 275/L Forest Pest Management (Linda Larish- lecturer), AG 245/L Silviculture(Orlo), AG 291 Forest Ecosystem Management (Orlo) and GEOG 170/L Foreest Inventorying and Field Mapping (Orlo).

J.B. Is the program paying lecturers from USDA grant?

- Not this semester as there were enough students to justify Linda's course. But last year the grant paid for Allie Atkins and Lisa Canale to teach Agroforestry Business Management and GIS respectively as both these courses were under enrolled.

Scholarships:

Hale Ma Aloha Scholarship? – Discount registration (\$50) for students at Hawaii Conservation Conference

NRCS – Reese Libby - Asian Pacific Scholarship: Three available for 2013 \$1,500 - \$2,000.

Alu Like – Noe – Can be combined with other summer internships.

2013 Summer internships –

Matt Kahoohanohano – PIPES - BIISC

Annual Program Review 2013

Hanoa Frietas-Puaa – PIPES – Mauna Kea Watershed Alliance /w Cheyenne Perry

Ashley Shaw – USFS - TEAM

Jeffery Pieper – USFS – TEAM

Keahialaka Balez – USFS – TEAM

Josaiah Jones - NPS? - TEAM

Leiana Kekoa – LSAMP - Internship TBD

Kahea Wailani Nihipali – LSAMP – TBD Possibly USFS

Roxane – Kamoleao – TEAM

Noe – no PIPES application from Leiana

Cole Rogers and Leiana both applied for the Forest solutions internship program

Kahea - Pohakuloa training, worked with Becky, in touch with Amanda Uowolo, needs to commit

Kaulana Hinds - not in TEAM level classes yet, as still taking pre-req reading, writing and math but has been working with USFS montane restoration project and good with rare plants. May look into TEAM support to work with Patty Moriyasu and Volcano Rare Plant Facility.

Jeffery Pieper - former USMC and has MS in Business , would like to see him work with USFS data analysis to work with his mathematic skills.

Keahi Balez with Amanda, TMR worked with Bill Garnet - Genius on rare plants, but still beginner at taking forest team classes

Ashley Shaw- knows native plants and great photographer

Josaiah Jones - loves to hunt pigs, trying to find a place for him, have TEAM funding available.

Paul – will ask Steve at NPS and check if new project on Keaaumoku (PTA) erosion study needs help. Will email contacts. What are the requirements for stipends?

Orlo - 150 hours (\$1500) needs to have a supervisor who can report on the completion of the internship. Project must be forestry / natural resource related.

J.B. - what is going on with Kamoleao?

Orlo - hoping to build certified kitchen this summer, good potential, demonstration site for community and there will be a summer youth program in July. Hoping that new student Roxane to work on the project with TEAM funds and get some maile established in the un-cleared areas.

Other:

Becky – Recommends advising students to take higher level classes at HawCC so they will have easier transfer to UHH. Former TEAM student Beverly Medeiros mentioned to her that she and other students are not prepared quantitatively in math and chemistry for UHH biology classes.

Noe - if you cant do algebra you cant be good in chemistry

Orlo – the hardest math for the TEAM program is trigonometry (Math 120) which doesn't transfer well to UHH. But there is a new AS degree in Natural Science which will require higher level math which may be a good option for those transferring

Becky - do you let them use excel?

Orlo – Yes, they use it in Agroforestry, Field mapping and Silviculture (checklists, tree measurements and some calculations).

J.B. - Business course - calculate budgets? nothing complicated, put together numbers for budget

Orlo – they do this in Business 150 which is the preferred computing course (ICS 101 is another option but does not have a spreadsheet focus) Also in Agroforestry Business Management (AG 130 they make a business plan).

Current jobs and trends in workforce:

J.B.- consulting on Forest Stewardship Management Plans with DOFAW -, Elizabeth Boxer to get environmental consultant to train on how to do plans also includes landowners who want to grow native Hawaiian plants. Went over client list that does consulting, industry.

eucalyptus- harvesting in Pauuilo. Logs being taken to Kawaihae then shipped to China

jobs - operating machinery, truckers. Get Bill Stormont of American Forests to show videos on cutting logs. Lease is up in 2020 for now the trees are coppicing. Kauai project – 300 acres of Honduran mahogany in Kilauea also other small scale tree farmers (20 acres)

 - update taxonomy on excel file. need someone smart botanically to go through species list USDA data base - online goal search data base – what species and where planted Annual Program Review 2013
16
last updated: 2013-10-14

Orlo – AG 291 working on capstone project with Kua O Ka La in Puna, students making a agroforestry/restoration plan on 10 acres that will include oil production (kamani, coconut) bio-fuel and hardwoods along with other crops.

J.B. - Kamani oil is good, but better to bring in coconut oil from other places. – wood for fuel is the lowest end value, need to produce higher value stuff.

Noe - Conservation Career Day - 5/4/13 10am to 1pm at UH Hilo Campus Center, Family, give out information to public at Earth Day

Meeting adjourned - 4:30 pm

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

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

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

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

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

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