

HAWAI'I COMMUNITY COLLEGE PROGRAM REVIEW REPORT

TROPICAL ECOSYSTEM AND AGRO- FORESTRY MANAGEMENT PROGRAM (FOREST TEAM)

November 30, 2007

Assessment Period: July 1, 2005 to June 30, 2007

Initiators/Writers

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Program 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 Student Learning Outcomes is embedded in this ongoing systematic assessment. Reviewed by a college wide process, the Program Reviews are available to the college and community at large to enhance communication and public accountability.

**HAWAII COMMUNITY COLLEGE
FOREST TEAM PROGRAM
2005-2007**

A. Program Effectiveness

1. How does the program support the College’s mission and imperatives?

The College’s mission is, “To provide the community with a responsive educational environment that empowers learners to develop skills and knowledge to be responsible and productive in a complex world.” The Forest TEAM was created as a response to community’s request for a trained workforce in areas of resource management. The curriculum was developed to provide learners with the skills and knowledge that will allow them to become productive and successful members of our community, economically, and socially.

The interconnections of the Forest TEAM Program with Hawai`i Community College, four-year Universities and employers can be seen in Figure 1.

2. Program Learning Outcomes:

The goal of the Forest TEAM program is to educate students to supply the workforce needs for Ecosystem Management Technicians by government agencies and private businesses. The program combines hands-on field courses with advanced technology using computers, Global Positioning Systems (GPS), Geographic Information Systems (GIS), digital surveying instruments and digital environmental monitoring instruments. Other goals are to prepare students to move on to 4-year degree programs and to be capable of starting their own successful businesses.

Table 1—List of Program Learning Outcomes

PLO 1	Apply basic eco-system concepts to natural resources
PLO 2	Use an understanding of general science concepts to apply experimental designs
PLO 3	Use knowledge of applicable laws and regulations to make decisions about managing ecosystems
PLO 4	Apply effective interpersonal and communicatin skills
PLO 5	Recognize, collect, and interpret field data
PLO 6	Apply effective management practices to commercial or conservation efforts

Figure 1. Program Map. The paths students take through the Forest TEAM program showing the relationships both within the program and the connections to the wider community

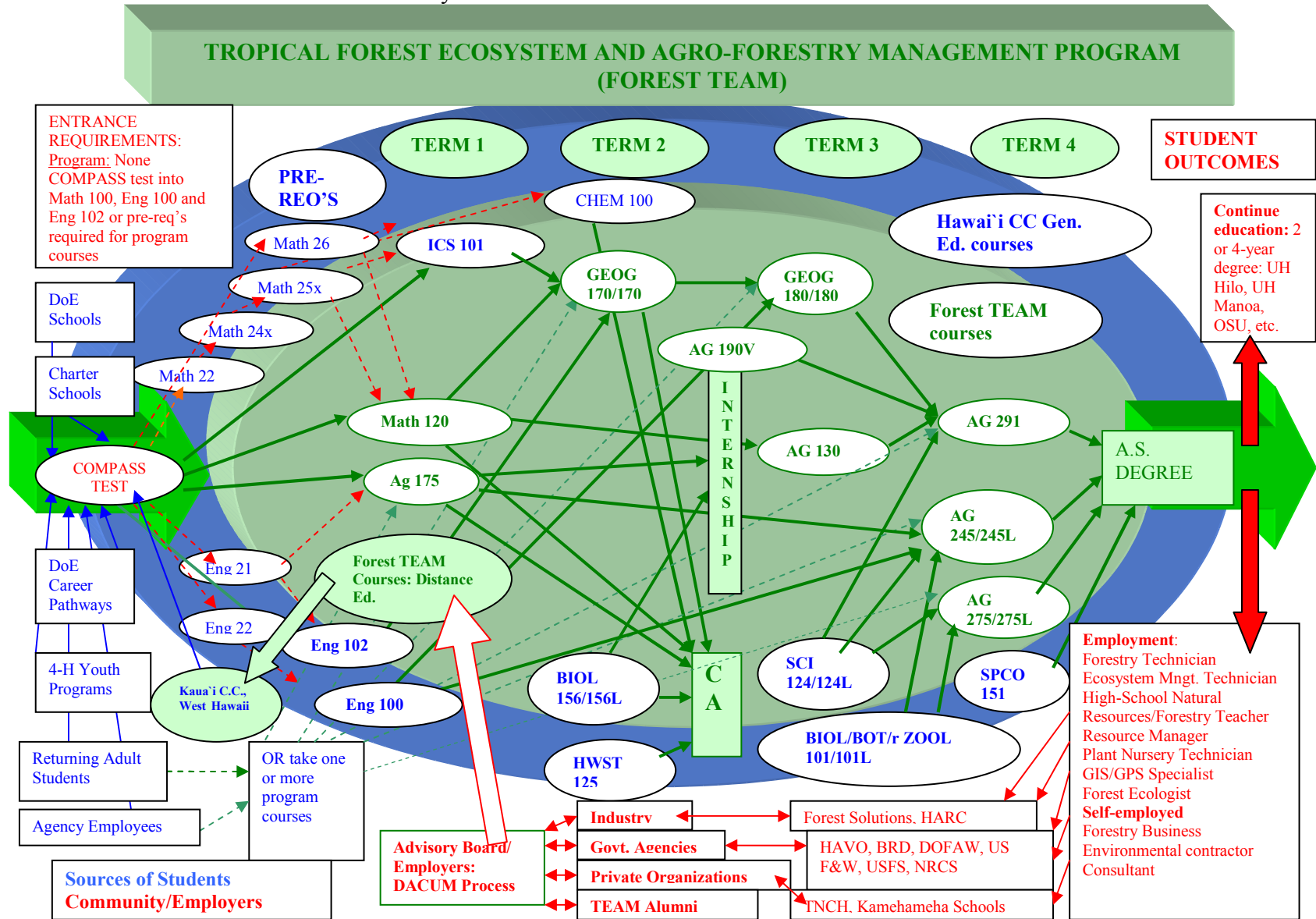


Table 2—Program Learning Outcomes by Courses

COURSE	PLO #1	PLO #2	PLO #3	PLO#4	PLO#5	PLO#6
AG 130				X		X
AG 175	X	X		X	X	X
AG 175L	X	X		X	X	X
AG 190V	X	X		X	X	X
AG 245		X			X	X
AG 245L		X			X	X
AF 275	X	X	X	X		X
AG 275L	X	X	X	X		X
AG 291	X	X	X	X	X	X
GEOG 170					X	
GEOG 170L					X	
GEOG 180					X	
GEOG 180L					X	

Table 3—Levels of Implementation of PLO Assessment

	A	D	P	SCQI	Assessment Strategy
PLO #1	A				
PLO #2	A				
PLO #3	A				

Key (reference: Barbara Beno’s letter, 9-12-07; ACCJC’s evaluation of Institutional effectiveness, rubric III): A=Awareness, D=Development, P=Proficiency, SCQI=Sustainable Continuous Quality Improvement

Table 4A—Percentage of Program Courses with SLO’s

100% of Program courses with SLO’s	Of these, 20% are being assessed
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Table 4B—Percentage of Program Courses Reviewed within the Previous 5 Years NA %

Many of the courses were reviewed and approved through the curriculum review process over the last five years; however a systematic procedure has been reinstated following Haw 5.250. Every AA Degree course will be reviewed every five years.

3. Program Strengths and Weaknesses

The Forest TEAM Program is a relatively new program that earned permanent status by the BOR in Fall 2005. Although the enrollment figures are relatively low, they have

increased dramatically since the program's inception and for the last 3 years have leveled to an average of 34 students majoring in the Forest TEAM Program. Concomitantly, the number of student semester hours for program majors, average class size and class fill rate have also increased during this reporting period. There has also been a dramatic increase in the number of degrees and certificates earned with over 75% of these graduates are in a 4 year university program or employed in the forest management workforce. This supports our primary program learning objective of training students to find jobs in forest ecosystem management or further their education. During this reporting time, Dr. Fred Stone retired and a full time faculty member and a part-time office manager resigned from the program. The two newly hired faculty members are still learning how to manage the Forest TEAM Program which is a major weakness. Fortunately, Dr. Stone is advising the new faculty and helping to manage the grants. In addition, the program is in the process of hiring a new student worker to help manage the office.

Program Strengths (S) and Weaknesses (W)

S1 - Surveys completed by students and employers affirm the quality of the program in meeting student and employer needs.

S2 - The Forest TEAM program maintains a strong relationship with their Advisory Board. The advisory board helps the program strengthen the curriculum, hosts field trip and learning experiences for students, provides internship opportunities for students and responds to requests from faculty. The Advisory Board is an integral part of assessing and providing feedback on program quality.

S3 - Forest TEAM program has developed distance learning capabilities to deliver the program to the West Hawai'i campus and potentially to any neighbor island in the future.

W1 – Students who want to go on for a 4 yr BA degree often have to repeat or take extra classes, so that it takes them a total of 5 - 6 years.

W2 – The two new faculty members are still learning how to most effectively teach their courses and run the Forest TEAM Program. The forest TEAM Program recently lost its office manager which has greatly hindered its ability to operate.

W3 – Enrollment is not at full capacity

B. Action Plan including Budget Request

The Program coordinator with the assistance of the other faculty member and the office manager will continue to assess the effectiveness of PLOs and modify the course work as necessary. In addition they will continue to recruit at local high schools and develop articulation with appropriate 4 year university programs (table 5). The hiring of a new

office manager will greatly facilitate the program's operation and improve communication with internal and external entities. This will especially be important for updating our website which has proven to be effective for recruitment and for maintaining office and course supplies (table 6).

During the first four years of the program TEAM has been able to fund infrastructure development through federal grants from NSF/ATE, USDA/CSREES, Title I, and EPSCoR. This has permitted the program to purchase 3 vans, a truck, and a tractor with attachments for field based laboratories. We have also purchased computers and GIS and ERSI software licenses for the computer laboratory, GPS units, and electronic surveying instruments. GPS units, Computers and software will need to be upgraded approximately every three years, and, if release time can be secured, TEAM faculty will actively seek further grant funds to do this.

Table 5—Top 6 Non-Cost Items (Including SLO & PLO completion, and assessment)

Task:	Academic yr.	Who is responsible	Best Fits which ADP Goal	Addresses which strength or weakness
1. Survey graduates	Spring 2008	Program Coord.	A	S1
2. Use survey results to revise Program Learning Outcomes	Fall 2008	Program Coord.	A	S1
3. Work with the Advisory Board to continue adapting and revising the program to meet the needs of the employers.	2008-12	Program Coord.	A	S1
4. work with the Natural Resources Career Pathways program in increase enrollment	2008-12	Program Coord.	A	W3
5. Assess SLOs	2008-12	Faculty	A	S1
6. complete articulation agreement UHH, UHM & OSU	2007-08	Program Coord.	B	W1

Key to abbreviations:

ADP Goals are: A, B, C, D, E

Strengths/Weaknesses are numbered (S1, S2... W1, W2...--from A.3.)

Table 6A. —Top 6 Cost Items (add rows as needed; examples given)

Task:	Academic Yr.	Who is responsible	\$ amount & budget category Except R/M	Best fits which ADP Goal	Supported by ADP Resource Requirement? Y/N	Addresses which strength or weakness
1. hire 1 FTE-APT	2008-09	Program Coord.	\$24 K, P	A	N	W2
2. Expand web site	2008-09	Office manager	\$500	A		W3
3. purchase new fax machine, scanner,	2007-08	Office manager	\$1 K	A	N	S1
4. update GIS computer programs	2008-09	Office manager	20K	A		S1
5. Purchase new GPS hardware and software	2008-09	Office manager	20K	A		S1

Key to abbreviations:

ADP Goals are: A, B, C, D, E

Budget Categories: P=Personnel; S1x=Program Review Special Fund;

SE=Supplies Enhanced; Eq=Equipment

Strengths/Weaknesses are numbered (S1, S2, S3, W1, W2, W3—from A.3)

Table 6B.--Repair and Maintenance

Nature of Problem	Describe Location: e.g. Building(s) & Room(s)
Annual vehicle maintenance	Forest TEAM parking lot

Table 7—Equipment Depreciation, if applicable (add rows as needed; examples given)

Program Assigned Equipment (E) and Controlled Property (CP)	Category: CP or E	Expected Depreciation Date	Estimated Replacement Cost
Classroom computers	CP	2009	\$30K
GPS units	CP	2008	10K

Key to abbreviations:

CP=Controlled Property w/item value \$1K-\$5K

E=equipment w/item value >\$5K;

C. Table 8—Data Elements

	AY 04-05	AY 05-06	AY 06-07
1. Annual new and replacement positions in the State	1064	1064	1064
2. Annual new and replacement positions in the County	109	109	109
3. Number of majors	36	32	34
4. Student Semester Hours for program majors in all program classes	154	96	120
5. Student Semester Hours for Non-program majors in all program classes	16	38	16
6. Student Semester Hours all program classes	170	134	136
7. FTE Program enrollment	11.33	8.93	9.07
8. Number of classes taught	8	9	7
9. Determination of program's health based on demand (Health, Cautionary, or Unhealthy)			
10. Average Class Size	9	6.67	8.29
11. Class fill rate	63.72%	46.15%	50.43%
12. FTE of BOR appointed program faculty	0	0	0
13. Student/Faculty ratio	0:1	0:1	0:1
14. Number of Majors per FTE faculty	28.35	32	31.78
15. Program Budget Allocation (Personnel, supplies and services, equipment)	\$63,198.10	\$49,556.00	\$52,789.10
16. Cost Per Student Semester Hour	\$371.75	\$369.82	\$388.16
17. Number of classes that enroll less than ten students	4	7	4
18. Determination of program's health based on Efficiency (Healthy, Cautionary, or Unhealthy)			
19. Persistence of majors fall to spring	66.67%	81.25%	76.47%
20. Number of degrees earned (annual)	2	4	10
21. Number of certificates earned (annual)	6	3	4
22. Number of students transferred (enrolled) to a four-year institution in UH	2	0	0
23. Perkins core indicator: Academic Attainment(1P1)	100.00%	100.00%	100.00%
24. Perkins core indicator: Technical Skill Attainment (1P2)	100.00%	100.00%	83.33%
25. Perkins core indicator: Completion Rate (2P1)	100.00%	75.00%	50.00%
26. Perkins core indicator: Placement in Employment Education, and Military (3P1)	50.00%	50.00%	66.67%
27. Perkins core indicator: Retention in Employment (3P2)	100.00%	100.00%	100.00%
28. Perkins core indicator: Non Traditional Participation (4P1)	42.11%	57.14%	50.00%
29. Perkins core indicator: Non Traditional Completion (4P2)	33.33%	80.00%	40.00%
30. Determination of program's health based on			

effectiveness (Healthy, Cautionary, Or Unhealthy)			
31. Determination of program's overall health (Healthy, Cautionary, or Unhealthy)			
32. Number of FTE Faculty	1.27	1	1.07

**Note: Items 9 & 18, 30 & 31 are determined by writer. Items 23-29 use Perkins data from previous year
Approved 10/25/07**