PALAU
COMMUNITY
COLLEGE

"We Strive to Guarantee Quality and Excellence"

Palau Community College is an accessible public educational institution helping to meet the technical, academic, cultural, social, and economic needs of students and communities by promoting learning opportunities and developing personal excellence.

Instructional Programs
(Academic Degree & Certificate Programs)

Three Year Program Review

Degree / Certificate Program

Air Conditioning and Refrigeration Technology

Period of Three Year Review

Fall 2013 to Summer 2016

Program Review <u>Completed</u> By:

Name	Title	Signature	Date
Galindez Kiep	Instructional Assistant		6/29/17

Program Review <u>Certified</u> By:

Name	Title	Signature	Date
Robert Ramarui	Dean, Academic Affairs		6/29/17

Program Review <u>Received</u> By: (Institutional Research & Evaluation Office)

Name	Title	Signature	Date
Ligaya T. Sara	Institutional Research		6/29/17

Purpose:

Program review at Palau Community College is a process that provides an extensive evaluation of academic and non-academic programs on a three year basis. The results of yearly assessments (using the FAMED process) are compiled into the one three year review cycle.
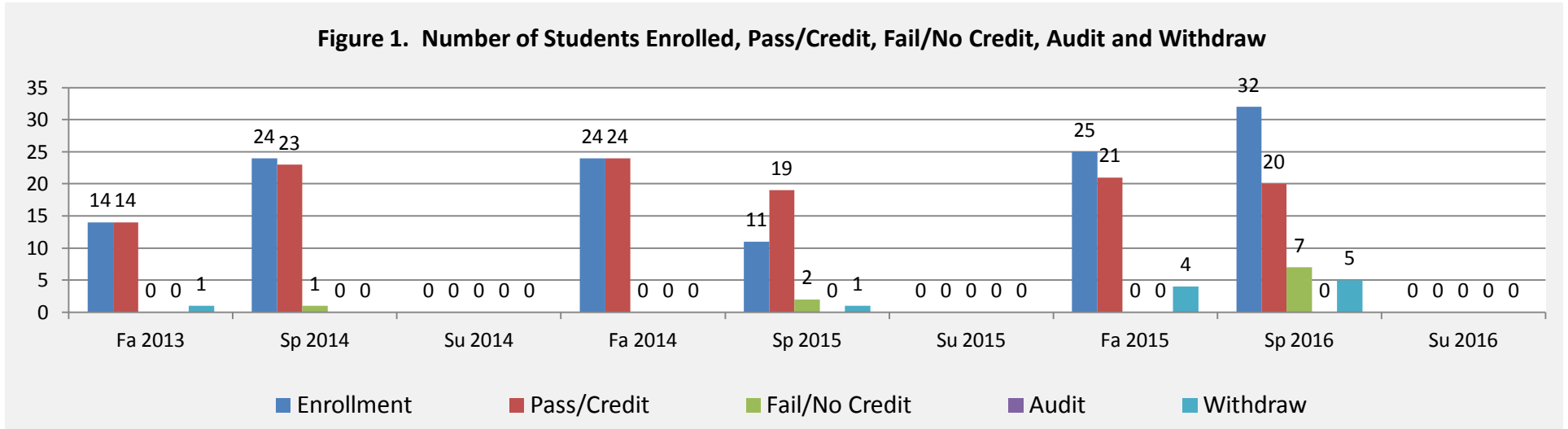
The purpose of program review is to evaluate program sufficiency to allow definite strategies to be developed for major revisions, to provide information for consideration when decisions are made, and to develop recommendations to improve institutional effectiveness.

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Instructions for completing Program Review:

1. Type your text into the boxes. The text boxes will expand to accommodate the amount of text spaces you need.

2. Individual instructions are included before each section.

3. Submit completed and signed Program Review in both hard copy and electronic copy format to the Institutional Research & Evaluation Office.

4. Required supporting documents must be included during submission.

   ➢ Appendix A: CLOs – PLOs – ILOs Mapping (e-copy only)

   ➢ Appendix B: Most Approved CLOs and PLOs (e-copy only)

   ➢ Appendix C: FAMED grid of all course assessment data within review cycle (e-copy only)

5. Be sure to keep both hard and electronic copies for your file.

Note: Other college plans may include the 15-Year Institutional Master Plan, the 5-Year Technology Plan, Institutional Learning Outcomes, Institutional-Set Standards for Student Achievement, or other plans, such as an approved department plan or committee plan.

1.0 Program Data

Figure 1. Number of Students Enrolled, Pass/Credit, Fail/No Credit, Audit and Withdraw

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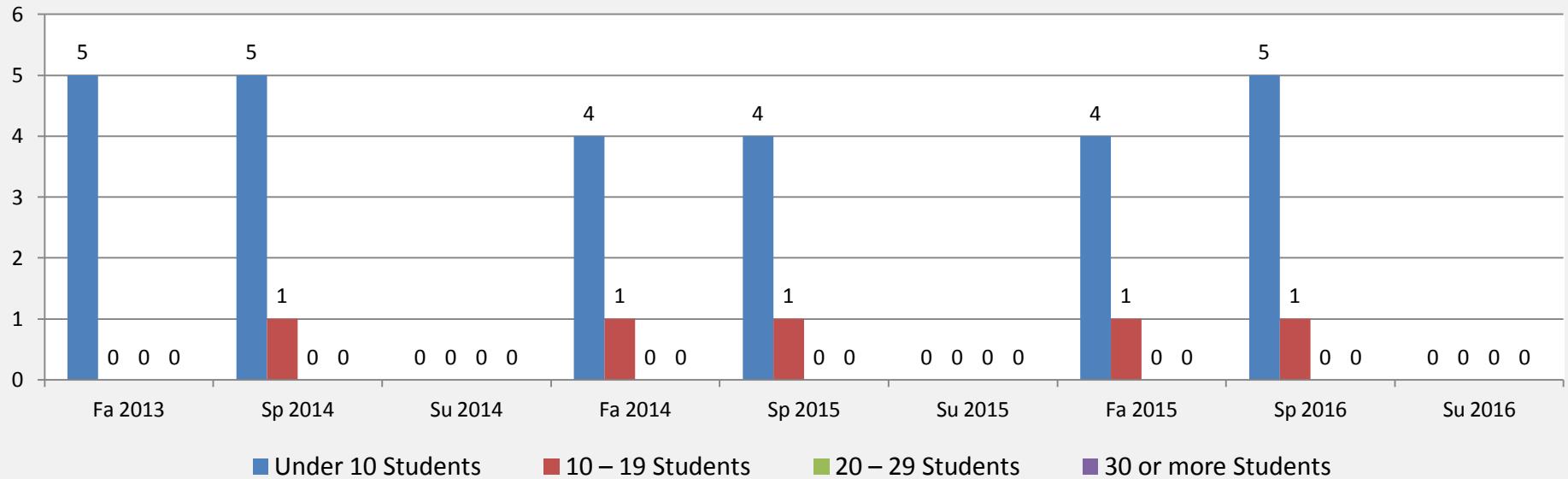
Brief summary of data

For the most part, the majority of students who completed AC program courses did well and completed the courses with passing grades. Withdrawal numbers were low as were failing grade numbers. Course information included students in WE110 who may be from other majors, such as Automotive Mechanics Technology (AM) and Small Engine and Outboard Marine Technology (SE). Students majoring in the AC program are under 10. Students who were in AM213 were also AM students. Although under the AM program, it is a required course for the AC program also; however this course was removed from the AM program in fall 2016 leaving it a course only for AC students.

Figure 2. Number of Graduates
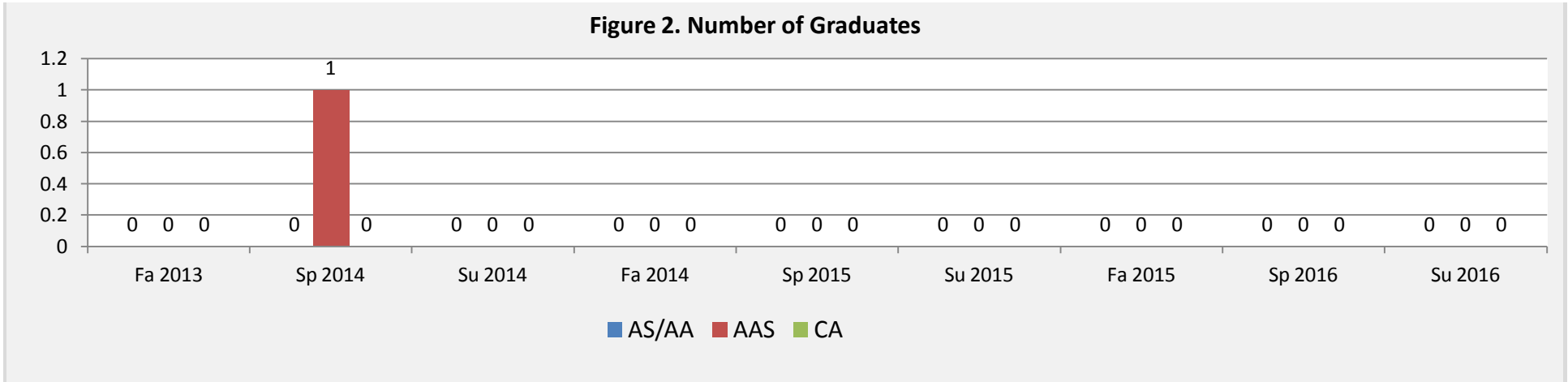
Brief summary of data

During this three year period review 1 student graduated. There are under 10 students majoring in the AC program. Several are second year students who should be completing the program by summer 2018.

Figure 3. Number of Classes Based on Student Enrollment

Legend: Under 10 Students | 10 – 19 Students | 20 – 29 Students | 30 or more Students

Brief summary of data

AC courses have enrollments under 10 students while program courses WE110 and AM113 will have larger enrollment due to students from other programs (AM and SE) also needing the courses for program requirements. This is due to the low number of students majoring in the AC program.

Figure 4. Class Offering

Legend:
- Total Prog/Dept Classes Taught
- Total Lecture ONLY Classes
- Total Lecture and Lab Classes
- Total Lab ONLY Classes
- Total Online
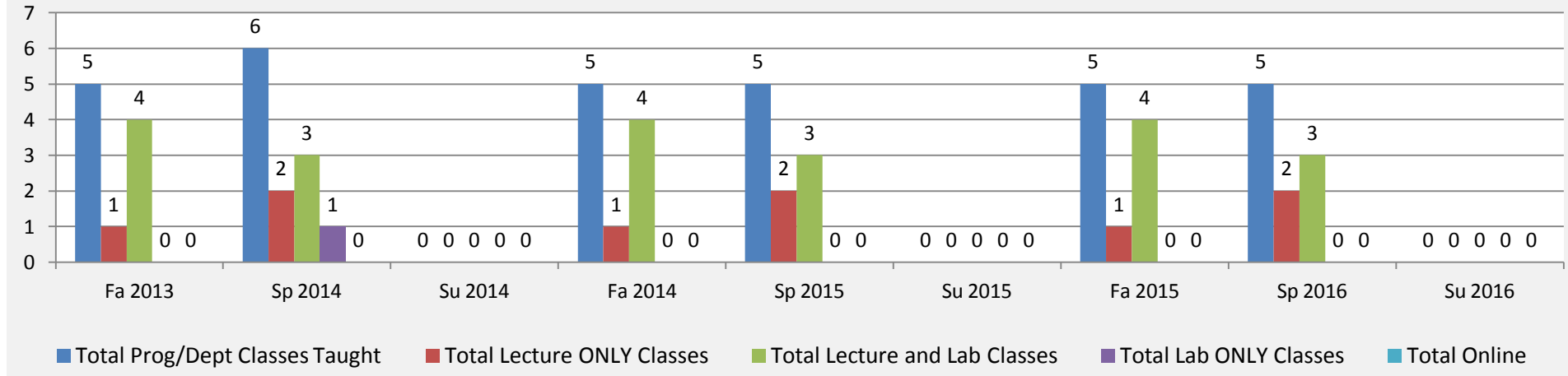
Brief summary of data

There were no courses offered during any summer session during this assessment period. Only the internship course (AC223) would be offered in the summer session unless a request is made from the AC advisor for a graduating student who has a remaining AC course. This would need to be a special case, such an emergency in the immediate family which prevented a student from completing the one program course before enrolling in the internship course. None of the AC program courses are taught in the distance education mode of delivery although students may choose to take general education courses online.

Figure 5. Faculty Head Count

Bar chart showing Full Time Faculty (blue) and Part Time Faculty (red) head count by term:

Term	Full Time Faculty	Part Time Faculty
Fa 2013	2	1
Sp 2014	2	2
Su 2014	0	0
Fa 2014	2	1
Sp 2015	2	1
Su 2015	0	0
Fa 2015	1	2
Sp 2016	1	1
Su 2016	0	0

■ Full Time Faculty   ■ Part Time Faculty
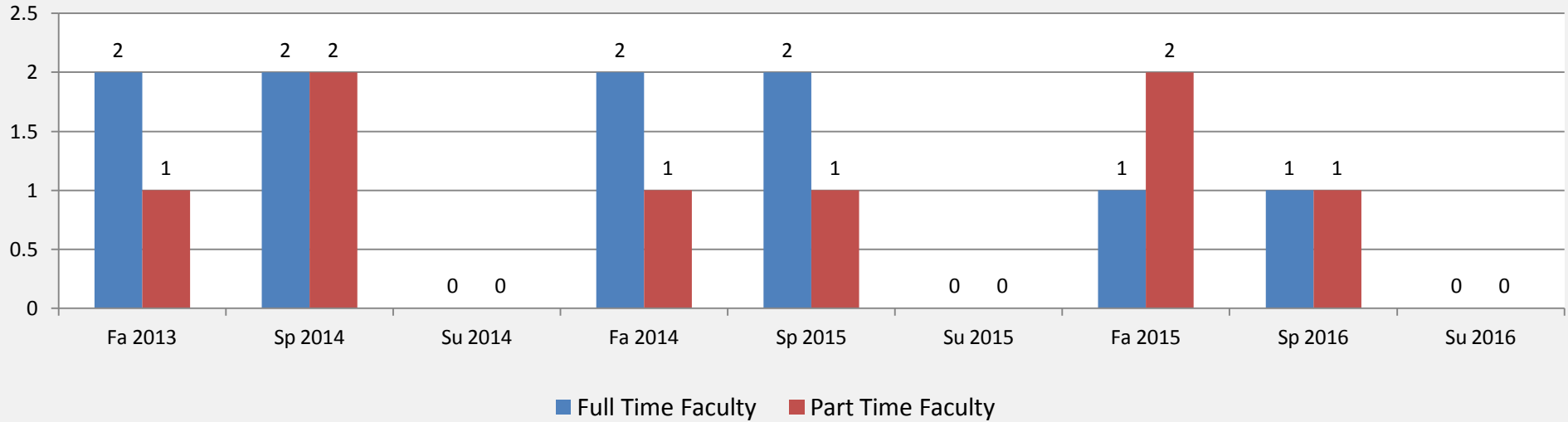
Brief summary of data

From fall 2013 to spring 2015, the program had two full time instructors. In summer 2015, one of the full time instructors resigned. The program currently has one full time instructor and uses full time faculty in other areas to teach some of the courses. A welding instructor, while a full time faculty, is not an AC full time faculty but always teaches the welding course which is considered an AC program course. Other adjunct faculty assist with the SE101 Boat Operations course.

Table 1: Faculty to Class Size Ratio (Program Headcount)

Ratio	Fall 2013	Spring 2014	Summer 2014	Fall 2014	Spring 2015	Summer 2015	Fall 2015	Spring 2016	Summer 2016
Full Time Faculty (F : S)	1 : 3.5	1 : 5	__ : __	1 : 4	1 : 5	__ : __	1 : 5	1 : 16	__ : __
Part Time Faculty (F : S)	1 : 8	1 : 7	__ : __	1 : 15	1 : 12	__ : __	1 : 8.5	1 : 15	__ : __

Brief summary of data

The program has a low enrollment and new students are not choosing this program as their major. From fall 2013 to spring 2015, the program had an instructor and an instructional assistant teaching the courses. In the summer of 2015, the instructor resigned leaving one faculty for the program. Enrollment remains low. The largest class is the welding class which also has AM and SE students taking it along with AC students. In spring 2016, the full time faculty taught all AC courses which accounts for the larger student ratio.

II. Student Learning and Curriculum

How many program courses are there? (refer to catalog or recent approval by CPC)	%of courses with Identified CLOs	List all revised program courses outlines or proposed new courses that received CPC approval within this review cycle	% of PLOs aligned with ILOs
10	100%	AC223 – 1/11/16	100%
		WE110 – 4/26/16	

Provide Summary of <u>Student Learning and Curriculum</u> in the box below. Summary should include reasons for course revisions and course proposals.

The internship course, AC223, was revised to allow for recording of actual tasks by the internship supervisor to be noted and students are assessed by the site supervisor. The number of CLOs were reduced to 2. The welding course, WE110, which is also a program course was revised as it was outdated. Revisions included the title, course content, CLOs and the CLO ratings.

All of the AC course need to be reviewed and updated except the Internship course. The AM213 course concepts needs to be incorporated into air conditioning courses where appropriate as the Committee on Programs and Curricula requested. It is coded as AM (Automotive Mechanics Technology) as it was also a required course for the AM program until fall 2016.

III. Course Assessment Data

Year 1: School Year ___Fall 2013 to Su 2014____

Semester Assessed	Course Assessed	CLO - PLO Mapping	Results of Assessments
Fall 2013	AC111	CLO 1, 4, 5 – PLO 1 CLO 4, 5 – PLO 2 CLO 4 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Fall 2013	AC112	CLO 1,2,3,4,5 – PLO 2 CLO 1,2,3,4,5 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Spring 2014	AC121	CLO 1,2,3,4,5 – PLO 1 CLO 1,2,3,4,5 – PLO 2 CLO 1,2,3,4,5 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Fall 2013	AC122	CLO 2,3,4,5 – PLO1 CLO 1,2,3,4,5 – PLO 2 CLO 1,2,3,4,5 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Fall 2013	AC211	CLO 1,2,3,4,5 – PLO 2 CLO 1,2,3,4,5 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Fall 2013	AC212	CLO 1,2,3,4,5 – PLO 2	CLO 1: 100% of students assessed performed at the proficiency level.

Semester Assessed	Course Assessed	CLO - PLO Mapping	Results of Assessments
		CLO 1,2,3,4,5 – PLO 3	CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Spring 2014	AC213	CLO 1,2,3,4 – PLO 1 CLO 1,2,3,4,5 – PLO 2 CLO 1,2,3,4,5 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Spring 2014	AC221	CLO 1,2,3,4 – PLO 1 CLO 1,2,3,4,5 – PLO 2 CLO 1,2,3,4,5 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Spring 2014	AC223	CLO 1,2,3,4,5 - PLO 2 CLO 1,2,3,4,5 - PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Spring 2014	WE110	CLO 1,2,3,4,5 - PLO 2 CLO 1,2,3,4,5 - PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. (exam) CLO 1: 100% of students assessed performed at the proficiency level. (project) CLO 2: 42% of students assessed performed at the proficiency level. CLO 3: 42% of students assessed performed at the proficiency level. CLO 4: 85% of students assessed performed at the proficiency level. CLO 5: 57% of students assessed performed at the proficiency level

Year 2: School Year __Fall 2014 - Su 2015_____

Semester Assessed	Course Assessed	CLO - PLO Mapping	Results of Assessments
Fall 2014	AC111	CLO 1, 4, 5 – PLO 1 CLO 4, 5 – PLO 2 CLO 4 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Fall 2014	AC112	CLO 1,2,3,4,5 – PLO 2 CLO 1,2,3,4,5 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Fall 2014	AC211	CLO 1,3,4 – PLO 1 CLO 1,2,3,4,5 – PLO 2 CLO 1,2,3,4,5 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: not assessed.
Fall 2014	AC212	CLO 1,2,3,4,5 – PLO 2 CLO 1,2,3,4,5 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Spring 2015	AC121	CLO 1,2,3,4,5 – PLO 1 CLO 1,2,3,4,5 – PLO 2 CLO 1,2,3,4,5 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Spring 2015	AC122	CLO 2,3,4,5 – PLO1 CLO 1,2,3,4,5 – PLO 2	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level.

		CLO 1,2,3,4,5 – PLO 3	CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Spring 2015	AC213	CLO 1,2,3,4 – PLO 1 CLO 1,2,3,4,5 – PLO 2 CLO 1,2,3,4,5 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Spring 2015	AC221	CLO 1,2,3,4 – PLO 1 CLO 1,2,3,4,5 – PLO 2 CLO 1,2,3,4,5 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Spring 2015	WE110	CLO 1,2,3,4,5 - PLO 2 CLO 1,2,3,4,5 - PLO 3	CLO 1: 90% of students assessed performed at the proficiency level. (exam) CLO 1: 90% of students assessed performed at the proficiency level. (project) CLO 2: 63% of students assessed performed at the proficiency level. CLO 3: 80% of students assessed performed at the proficiency level. CLO 4: 90% of students assessed performed at the proficiency level. CLO 5: 81% of students assessed performed at the proficiency level

Year 3: School Year __Fall 2015 to Su 2016_____

Semester Assessed	Course Assessed	CLO - PLO Mapping	Results of Assessments
Fall 2015	AC111	CLO 1, 4, 5 – PLO 1 CLO 4, 5 – PLO 2 CLO 4 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Fall 2015	AC112	CLO 1,2,3,4,5 – PLO 2 CLO 1,2,3,4,5 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Fall 2015	AC211	CLO 1,3,4 – PLO 1 CLO 1,2,3,4,5 – PLO 2 CLO 1,2,3,4,5 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Fall 2015	AC212	CLO 1,2,3,4,5 – PLO 2 CLO 1,2,3,4,5 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Spring 2016	AC213	CLO 1,2,3,4 – PLO 1 CLO 1,2,3,4,5 – PLO 2 CLO 1,2,3,4,5 – PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. CLO 2: 100% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 100% of students assessed performed at the proficiency level. CLO 5: 100% of students assessed performed at the proficiency level.
Spring 2016	WE110	CLO 1,2,3,4,5 - PLO 2 CLO 1,2,3,4,5 - PLO 3	CLO 1: 100% of students assessed performed at the proficiency level. (exam) CLO 1: 100% of students assessed performed at the proficiency level. (project) CLO 2: 85% of students assessed performed at the proficiency level. CLO 3: 100% of students assessed performed at the proficiency level. CLO 4: 85% of students assessed performed at the proficiency level. CLO 5: 90% of students assessed performed at the proficiency level

Provide Summary of <u>Course Assessment Data</u> in the box below. Summary should include how assessment results have led to improvement of course and program learning outcomes, student learning and achievement.

All of the students assessed in AC courses reached proficiency in all CLOs for all the AC courses. Especially the first spring semester (2014), students struggled in the welding (WE110) course. However, each spring semester after that, the proficiency rating increased so that by spring 2016, all students assessed in WE110 reached the proficiency level. It should be noted that AM and SE students also enroll in the welding course as it is required for their majors also.

IV. Program Learning Outcomes (PLOs) Assessment

Program Learning Outcomes Assessment Results

List PLOs	Proficiency Level	Results of Assessments
PLO 1	AC111CLO1,4,5 – 100% AC121CLO1,2,3,4,5 – 100% AC122CLO2,3,4,5 – 100% AC213CLO1,2,3,4 – 100% AC221CLO1,2,3,4 – 100%	100% of the students assessed performed at the proficiency level.
PLO 2	AC111CLO4,5 – 100% AC112CLO1,2,3,4,5 – 100% AC121CLO1,2,3,4,5 – 100% AC122CLO1,2,3,4,5 – 100% AC211CLO1,2,3,4,5 – 100% AC212CLO1,2,3,4,5 – 100% AC213CLO1,2,3,4,5 – 100% AC221CLO1.2.3.4.5 – 100% AC223CLO1,2,3,4,5 – 100% WE110CLO1,2,3,4,5 – 79% WE110CLO1 – 97%	98% of the students assessed performed at the proficiency level.
PLO 3	AC111CLO4,5 – 100% AC112CLO1,2,3,4,5 - 100%- AC121CLO1,2,3,4,5 – 100% AC122CLO1,2,3,4,5 – 100% AC211CLO1,2,3,4,5 – 100% AC212CLO1,2,3,4,5 – 100% AC213CLO1,2,3,4,5 – 100% AC221CLO1,2,3,4,5 – 100% AC223CLO1,2,3,4,5 – 100% WE110CLO1,2,3,4,5 – 79% WE110CLO1 – 97%	98% of the students assessed performed at the proficiency level.

Provide Summary of <u>Program Learning Outcomes Assessments</u> in the box below. Summary should include analysis of this cycle with previous cycles; how assessment results have led to major decisions made to support the improvement of program's student learning and student achievement.

There was no time during this three year review cycle that students assessed performed below proficiency. All PLOs were assessed through the required courses; therefore, all PLOs assessed reached the benchmark of 70%. With the assistance of the instructor, students in the program receive a lot of hand on instruction by troubleshooting and repairing the air conditioners on campus. At this time, there is no need to revise the program learning outcomes.

V. Evaluation of Previous Program Review Action Plan/s

Indicate the status of the previous program review action plans below. (Include all previous action plans.)

Action Plan Activity/Objectives	Status Complete/Ongoing/Incomplete	Updates of Action Plan/s (Report action plan individually.)
Establish online class using the air conditioning and refrigeration simulator program where the students can learn skills in troubleshooting and repair online.	Incomplete	Updated software is needed but was not requested by previous instructor who resigned after completing program review. Current instructor notes that while a simulator is a good learning tool, hands-on experience is a better learning tool and practice for skills as the simulator does not always project images as accurate as using the real models.
Review and update course outlines, CLOs and other documentations	Incomplete	WE110 and AC223 have been revised. All others need to be completed as soon as possible.
Have one computer room for students to use in their research/activity work.	Complete	There are several open labs for students to use including the library computer lab, the LRC tutoring lab and the open lab. MAP lab is available for AC course students also.
Purchase air conditioning and refrigeration units for students' practical lessons.	Ongoing	Students assist with troubleshooting and repairing campus air conditioners; however, supplies are not always available when needed.
Construct mock-up trainer to enhance teaching strategies and provide more hands-on training for the students.	Incomplete but no longer recommended	Instructor resigned so this was not constructed. Not needed as hands-on practice with actual air conditioners on campus is available and better than just a mock-up.
Train faculty in the use of technology as a support media to enhance lectures and content of the course.	Ongoing	Technology training is available when requested.

Provide Summary of the Evaluation of Previous Program Review Action Plan/s in the box below. Summary should include what measurable outcomes were achieved due to the actions completed; were the completed action

plans led to improvement of student learning and student achievement; and provide detailed explanation of action plans that are ongoing and plans that are incomplete.

Several of the previous action plans were not completed. The instructor resigned after completing the program review. However, not all of the incomplete plans are needed at this time. Students get hands-on practice in troubleshooting and repair by assisting the instructor with air conditioners that need repair which are located in buildings on campus. This is real life situational experience and better than using a simulator or mock-up. The simulator can be used on a needs basis for students who required additional practice.

There are several computer labs available for all students to use including one in the shop area. Individual computer labs for each program are not necessary at this time so this plan will not be carried over. At this time, the current instructor is not using research as assignment activities. One desktop computer would be enough to use to show CDs and use with the simulator for additional practice when a student need such.

Outlines are outdated and so this plan needs to be included again in this program review. PLOs need to be reviewed also. Revisions will be made as needed.

The current instructor has received NCCER training for instructional methods. He is certified to teach NCCER courses in his field. He has also received training in his field through the Taiwanese government, solar training and training with central air conditioning as used in the national capitol building. In addition, he is also taking courses in preparation of beginning a bachelor's degree program. Technology training is available when requested.

VI. Action Plans

Based on this program review results, describe the program action plan for the next three (3) academic years. Include necessary resources.

Action Plan Activity/Objectives	How will this action plan improve student learning outcomes? (CLO, PLO, ILO)	Needed Resources (if any)	Timeline
Review and update all AC outlines	The outlines are outdated. By updating the outlines, the program will keep abreast of the air conditioning field and its changes.	None – it is part of the tasks of the program instructors	Immediately
Continue professional development training	By staying current with changes in the AC field and receiving training in teaching strategies and assessment, the instructor will be able to keep the courses and program updated.	Financial support - Travel expense if training is off island and cost of trainings if applicable.	Starting summer 2017
Materials, parts and supplies for teaching and repairing air	Students will continue to receive hands-on practice and improve their troubleshooting and repair	Financial support	Every semester

conditioners	skills.		
Need gages and Recovery tanks for different types of refrigerant available in Palau	These are needed for repair of air conditioners. Students get hands-on practice when assisting instructor with repairs.	Financial support	Spring 2017
HVAC simulator	Will assist student with learning skills needed to reach proficiency with all course and program learning outcomes	Financial support	Spring 2017
1 desktop computer and printer	To use with simulator and show CDs to help students with course content CLOs and PLOs.	Financial support	Spring 2017
lockers	Students will store tools and other change of clothes (when shower is repaired) safely. Tools are used to practice skills. Change of clothes needed for safety after using Freon.	Financial support	Spring 2017
Repair restroom	Students will learn safety habits.	Financial support.	Spring 2017

Provide Summary of Action Plans in the box below. Summary should include program major strengths; program needs and any recommendations for improvements based on assessment results, data and/or other college major plans. The summary needs to indicate overall program needs that may require financial support from the institution.

A major strength of the program is that students have ample opportunities to learn and practice the skills needed for troubleshooting repairing air conditions right on campus. These skills are strengthened as they repair and modify damaged AC units of the college. Graduates of the program will have had real life experience even prior to taking the internship course. The refrigerant recovery method taught teaches concepts and efficient approaches to environmental protection of the ozone layer.

Another strength is the current instructor is a board member of AC organization, RACT. As requested, the organization is currently working on certification requirements to ensure that all RAC technicians in Palau are certified.

The outlines are old and have not been revised in 8 years. Reviewing outlines ensures that the program content is current and students are learning the proper skills to repair today's air conditioners.

Professional training needs to be continued to give the instructor improved skills in teaching deliveries and strategies. Additional training will also keep the instructor current with changes in the air conditioning field.

Materials, parts and supplies for teaching and repairing air conditioners are needed each semester. The students and instructor need these for repairing campus air conditioners when they break down. Additionally, gages and recovery tanks for different types of refrigerant available in Palau are needed as the college has various sizes and models of air conditioners throughout the campus.

HVAC simulator and desktop computer and printer will be used to help students reach proficiency in all course and program learning outcomes. Students needing extra practice can use the simulator during their free time to help improve their skills. It challenges learners to master diagnostic and troubleshooting skills across seven pieces of HVAC equipment including air conditioners.

Repairing the laboratory and providing lockers will help with the safety of the students. Freon is sticky and needs to be washed off properly and the laboratory shower no longer works. The lockers will be sued to store tools and a change of clothes. The toilets also need repair.

VII. Resource Requests

Itemize resource request below.

Type of Resource	Detailed Description	Estimated Amount Requested	Justification
Personnel	None until enrollment increases		
Facilities	Restroom shower is broken as well as one toilet seat.	$2,000	Restroom needs attention because the Freon needs to be washed off body after students add to air conditioners. This request was on the last program review along with other renovations but this one is what really needs to be completed.
Equipment	Gages Recovery tanks Desktop computer printer	$900 -$300 each $900 -$300 each $800 $250	Gages and recovery tanks are needed to repair air conditioners. Desktop computer will be used to show CDs relating to course content and also to install simulator for students to use for additional practice when needed.
Supplies	Materials and parts needed for air conditioning repair including Freon	$500	In order for hands-on experience and repair requests to be accomplished, materials and parts are needed, especially Freon.
Software	HVAC simulator	$55.00	Used for students who need extra practice to reach or increase proficiency.
Training	Off island CTE conference	$7,000	This will assist the instructor in keeping current with changes in the AC field.
Other	Student lockers	$$300	
Total		$12,205.00	

Provide Summary of Resource Request in the box below. Summary should connect the resources requested to course, program and institutional learning outcomes assessment results and/or any other college major plans.

The critical improvement need for facilities is the repair of the restroom facility. Both toilets need repair and the shower needs repair also. The shower is necessary for the safety of the students as Freon sticks to the clothes and skin.

Gages and recovery tanks are needed to service, repair and maintain air conditioners on campus. Because the campus has a variety of air conditioner sizes and models, different gages and recovery tanks are needed. Materials, parts and Freon are also needed for air conditioning troubleshooting and repair including Freon. This request connects to all course and program learning outcomes.

Desktop computer and printer will be used for the HVAC simulator and CDs which will help students reach or improve course and program learning outcomes. In addition, the instructor will use the desktop and printer for instructional and assessment purposes and documentation of course assessment and program reviews. All course and program learning outcomes will connect with this request.

Off island CTE conference attendance if possible will assist with keeping the AC program and its courses current with changing requirements and technologies in the AC field. All course and program learning outcomes will connect with this request.

Student lockers will allow students a place to secure tools and a change of clothing.