

#### "We Strive to Guarantee Quality and Excellence"

Palau Community College is an accessible comprehensive 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

#### **Small Engine and Outboard Marine Technology**

#### Period of Three Year Review

#### Fall 2016 to Summer 2019

#### Program Review Completed By:

Name	Title	Signature	Date
Marvin Yarofaisug	Instructional Assistant	toff.	3/30/2020
Marvill Larotaisug	Ilistructional Assistant		701

#### Program Review Certified By:

Name	Title	Signature	Date
Deikola Olikong	Dean, Academic Affairs		3. 30. 2020

#### Program Review Received By: (Institutional Research & Evaluation Office)

Name	Title	Signature	Date
Ligaya Sara	Institutional Researcher	Sport	03.70.2020

#### **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.

#### **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. Examples are in **green**, remove when you start writing.
- 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 Updated & Approved Outlines within this cycle (e-copy only)

Appendix C: Most Updated Program Modification with PLOs within this cycle (e-copy only)

Appendix D: 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.

## I. Academic Degree Program Purpose (Program Description) and Relationship to the College Mission

1. State the purpose of this academic degree program below.

The Small Engine and Outboard Marine Technology is designed to provide students with technical knowledge, skills and proper work habits/attitudes necessary for employment in this field. The program prepares students to work and advance in their careers as mechanics, troubleshooters; parts counter salespersons or operators of their own small engine service and repair shop.

2. How is the academic degree program supporting the overall mission of the College?

Palau Community College is an accessible comprehensive 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.

Small Engine and Outboard Motor Technology program is an open door for students to study and learn how to fix and diagnose problems of the engine from small engines to larger engines. This program is design to provide knowledge, skills and proper work habits/attitudes necessary for employment in this field. The program prepares student to work and advance in their careers as a mechanics, troubleshooters, part counter salespersons, or operators of their own small engine service and repair shops. This program is supporting the overall mission of PCC college by aligning the course learning outcome (CLOs) to program learning outcome(PLO) and institutional learning outcome 1-5;

(1) Critical Thinking and Problem Solving, (2) Communication, (3) Quantitative and Technological Competence, (4) Diversity, (5) Civic Responsibility.

#### At the completion of this program, students will be able to:

- 1. Be employable in the field of Small Engine and Outboard Marine technology.
- 2. Demonstrate skills in diagram reading and testing.
- 3. Demonstrate skills in boat fitting and rigging.
- 4. Manage and operate their own service shops.
- 5. Demonstrate skills in diagnosing and repairing small engine and outboard motor.
- 3. Provide a brief history of this academic degree program below. Include the updates of major changes and accomplishments since the last review.

The Small Engine and Outboard Motor Technology (SEOMT) program began as a two year diploma program when Palau Community College was MOC (Micronesian Occupational Center). A number of the current courses were included in this program. By 1981, when the Center was now Micronesian Occupational College, the SEOMT program had seven (7) course and all were nine (9) credits each and students could earn either a Certificate of Achievement (CA-92 credits) or an Associate of Science degree (AS-103 credits) in six (6) quarters. The 1985-1987 catalog shows the now to be 57 credits

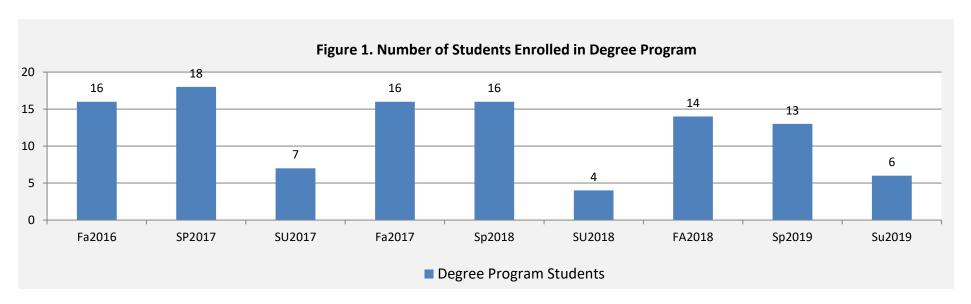
for the CA and 66 credits for the AS degree. Semesters were now being used and in four (4) semesters students could earn either. There was no internship course for either program. In 1992, the course *Onthe-Job Training* was first offered for five (5) credits with the name changing to *Internship* with a requirement of 9 credits.

In January 2005, with the approval of the Accrediting Commission of Community and Junior Colleges (ACCJC), the certificate program became an Associate of Applied Science degree program with the AS degree program being no longer offered. *Internship* is the cornerstone course and requires 4 credits.

To date the program has undergone several modifications to courses. In addition, under RPPL9-22, the skilled labor act, numerous certificates of competence and certificates of completion are offered as well as the Certificate of mastery once a student completes the program and earn its AAS degree.

#### II. Program Data

#### **Degree Program Students – Number of Students Enrolled in this Degree Program**



Provide summary of Figure 1 including its trends analysis.

The table above signifies the total student enrollment in all courses. Although the number of students that enrolled in the program decreased comparing fa2016 to su2019, it's important to understand that all students successfully passed and completed the courses, thus completing the program.

## **Program Courses Data**

#### (Course Completion Data of <u>Program Students</u> in each Program Course)

You may insert more rows as needed

Table 1a. Course Completion of Program Courses (Fall)

	FA 20 <u>16</u>				FA 20 <u>17</u>				FA 20 <u>18</u>					
Course	Passed	Failed	Withdraw	Enrolled	<u>Course</u>	Passed	Failed	Withdraw	Enrolled	Course	Passed	Failed	Withdraw	Enrolled
SE 112	3	0	0	3	SE 101	13	1	0	14	SE101	6	0	1	7
SE 113	3	0	0	3	SE 112	11	1	0	12	SE 112	6	0	1	7
SE 212	3	0	0	3	SE 113	9	0	0	9	SE 113	4	0	1	5
SE 213	3	0	0	3	SE 212	1	1	0	2	SE 212	4	0	1	5
					SE 213	1	1	0	2	SE 213	4	0	1	5

Table 1b. Course Completion of Program Courses (Spring)

	SP 2017					SP 2018				SP 2019				
Course	Passed	Failed	Withdraw	Enrolled	Course	Passed	Failed	Withdraw	Enrolled	Course	Passed	Failed	Withdraw	Enrolled
SE 122	3	0	0	3	SE 113	4	0	0	4	SE122	5	0	2	7
SE 123	3	0	0	3	SE122	6	1	1	8	SE123	5	0	2	7
SE 124	3	0	0	3	SE123	6	1	1	8	SE124	5	0	2	7
SE221	3	0	0	3	SE124	6	1	1	8	SE221	4	0	0	4
SE222	3	0	0	3	SE221	1	0	0	1	SE222	4	0	0	4
SE223	3	0	0	3	SE222	1	0	0	1					
					SE223	2	0	0	2					

Table 1c. Course Completion of Program Courses (Summer)

	SU 2017				SU 2018				SU 2019					
<u>Course</u>	Passed	Failed	Withdraw	Enrolled	<u>Course</u>	Passed	Failed	Withdraw	Enrolled	<u>Course</u>	Passed	Failed	Withdraw	Enrolled
SE223	4	0	0	4						SE223	5	0	0	5

#### Provide summary of Tables 1a, 1b & 1c including its trends analysis.

The tables above show the summary of the enrollment of the students who are in SE program, in all courses and also the number of students who passed, failed, or withdrew from the courses. Comparing the passing, withdrawal, and failing rates of the students; there are very few withdrawals for various reasons, but these tables show that most of the students who enrolled in SE courses during this review cycle successfully passed and completed the courses.

# Program Courses Data Course Completion Data of <u>ALL Students</u> in each Program Course

(Does not apply for LA and SD Programs)

You may insert more rows as needed

Table 2a. Course Completion of Program Courses (Fall)

	FA 2016					FA 2017				FA 2018				
Course	Passed	Failed	Withdraw	Enrolled	<u>Course</u>	Passed	Failed	Withdraw	Enrolled	<u>Course</u>	Passed	Failed	Withdraw	Enrolled
SE 112	3	0	0	3	SE 101	13	1	0	14	SE101	6	0	1	7
SE 113	24	2	0	26	SE 112	11	1	0	12	SE 112	6	0	1	7
SE 212	3	0	0	3	SE 113	23	1	1	25	SE 113	13	0	1	14
SE 213	3	0	0	3	SE 212	1	1	0	2	SE 212	4	0	1	5
					SE 213	1	1	0	2	SE 213	4	0	1	5

Table 2b. Course Completion of Program Courses (Spring)

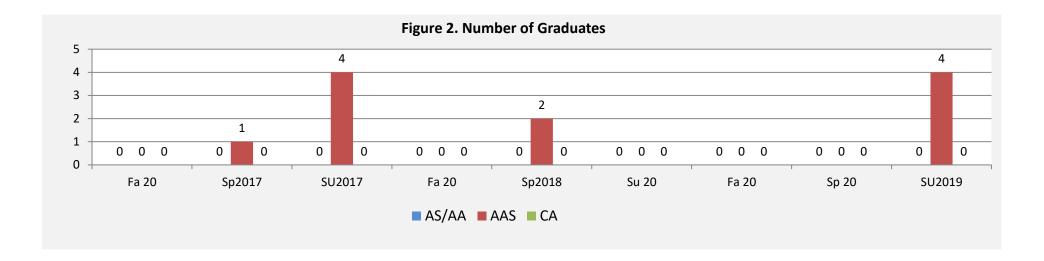
	SP 2017				SP 2018				SP 2019					
Course	Passed	Failed	Withdraw	Enrolled	Course	Passed	Failed	Withdraw	Enrolled	<u>Course</u>	Passed	Failed	Withdraw	Enrolled
SE 122	3	0	0	3	SE 113	7	1	0	8	SE122	5	0	2	7
SE 123	3	0	0	3	SE122	6	1	1	8	SE123	5	0	2	7
SE 124	3	0	0	3	SE123	6	1	1	8	SE124	5	0	2	7
SE221	3	0	0	3	SE124	6	1	1	8	SE221	4	0	0	4
SE222	3	0	0	3	SE221	1	0	0	1	SE222	4	0	0	4
SE223	3	0	0	3	SE222	1	0	0	1					
					SE223	2	0	0	2					

Table 2c. Course Completion of Program Courses (Summer)

	SU 2017				SU 2018				SU 2019					
<u>Course</u>	Passed	Failed	Withdraw	Enrolled	<u>Course</u>	Passed	Failed	Withdraw	Enrolled	<u>Course</u>	Passed	Failed	Withdraw	Enrolled
SE223	4	0	0	4						SE223	5	0	0	5

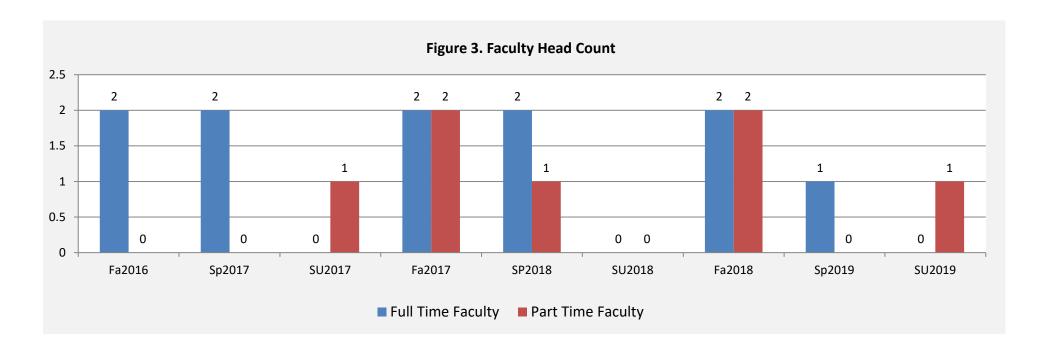
#### Provide summary of Tables 2a, 2b & 2c including its trends analysis.

The tables above show the number of all the students enrollment who are in all courses and also the number of students who passed, failed, and withdrew from the courses. Although the number of students that enrolled in the program is plentiful compared to the enrollment shown in data from Table 1a, it is important to understand that there are a number of students who were enrolled in the Agricultural (AG) Program taking SE113 as it is also a required program course for the AG program. The summer graduate number is higher as that is when most SE students complete the internship course which is the last course of the SE program. Comparing the passing, failing, and withdrawing rates of the students, there are very few withdrawals for various reasons, but these tables show that most of the students who enrolled in SE courses successfully passed and completed the courses.



#### Provide summary of Figure 2 including its trends analysis.

The table above shows the number of students who have successfully completed and graduated from the SE program and received their Associate of Applied Science degree. Although the number of students that graduated from the program is very low compared to the enrollment shown in data from Figure 1, it is important to understand that there are a number of students who enrolled in the Agricultural (AG) Program as one of the SE courses (SE113) which is also a required program course for the AG program. The summer graduate number is higher as that is when most SE students complete the internship course which is the last course of the SE program.



#### Provide summary of Figure 3 including its trends analysis.

The table above represents the full-time and part-time faculty that teach SE classes. From fall 2016 to spring 2017 there were 2 full-time faculty. These 2 full-time faculty ran the Small Engine and Outboard Marine Technology program teaching courses for SE major. The internship course is supervised by the internship coordinator. From fa2017 to sp2018 there were 2 full-time instructors; there were 2 part-time instructors in fa2017 and 1 part-time instructor in sp2018. There were no full-time or part-time instructors in su2018 there were 2 full-time instructors and 2 part-time instructors. There was 1 full-time instructor in the spring of 2019 and 1 part-time instructor in su2019.

Internship is offered every semester so the part-time instructor would be the internship coordinator and SE101 was the other course that required a part-time instructor until the program instructor was able to also instruct that course.

#### III. Student Learning and Curriculum

School Year	How many program	% of courses	List all revised program courses	% of PLOs
	courses are there? (refer	with Identified	outlines or proposed new courses	aligned with
	to catalog or recent	CLOs	that received CPC approval within	ILOs
	approval by CPC)		this review cycle	
2016-2019	11	100%	SE 112-1/2016	100%
			SE 113-1/2016	
			SE 123-1/2016	
			SE 124-1/2016	
			SE 212-1/2016	
			SE 213-1/2016	
			SE 223-1/2016	

Provide Summary of Student Learning and Curriculum in the box below. Summary should include reasons for course revisions and course proposals. If any course and/or the degree or the certificate program went through the validity process, include the information here.

7 of the program courses were revised and received CPC approval. CPC requires course be reviewed every 5 years and it was time for review of courses. The course learning outcomes were revised during this revision period. One course has been also reviewed and approved but will fall under the next program review. The rest of the courses are also being reviewed, but the review has not yet been completed. There are only 3 courses left to be reviewed and approved by CPC. All courses are aligned with the program learning outcomes. No new courses have been proposed as the program does not need any revision at this time.

#### IV. Course Assessment Data

Year 1: School Year <u>1 2016-2017</u>

Semesters	Course	CLO-PLO-ILO Mapping	Results of Assessments
Assessed	Assessed		
Fall 2016	SE101	CLO1-PLO1-ILO1,2,3,4,5	
		CLO2-PLO1-ILO1,2,3,5	Not Assessed
		CLO3-PLO1,4-ILO1,2,3,5	
Fall 2016	SE112	CLO1-PLO 1,4,5-ILO1,2,3	CLO1: 100% of students assessed and reach proficiency
			level
		CLO2-PLO1,4,5-ILO1,2,3	CLO2: 100% of students assessed and reach proficiency
			level
		CLO3-PLO1,4,5-ILO1,2,3	CLO3: 100% of students assessed and reach proficiency
			level
		CLO4-PLO1,4,5-ILO1,2,3	CLO4: 100% of students assessed and reach proficiency
			level
Fall 2016	SE113	CLO1- PLO1,4,5-ILO1,2,3	CLO1 67% of students assessed performed at
			proficiency level.

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		CLO2-PLO1,4,5-ILO1,2,3	CLO2 79% of students assessed performed at proficiency level.
		CLO3-PLO1,4,5-ILO1,2,3	CLO3 79% of students assessed performed at
			proficiency level.
Fall 2016	SE212	CLO1-PLO1,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the
		CLO2—PLO1,5-ILO1,2,3	proficiency level.
			CLO2 100% of the students assessed performed at the
		CLO3-PLO1,5-ILO1,2,3	proficiency level.
		CLO4-PLO1,4,5-ILO1,2,3	CLO3 100% of the students assessed performed at the proficiency level.
			CLO4 100% of the students assessed performed at the proficiency level.
Fall 2016	SE213	CLO1-PLO1,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the
		CLO2-PLO1,4,5-ILO1,2,3	proficiency level.
			CLO2 100% of the students assessed performed at the
			proficiency level.
Spring 2017	SE122	CLO1-PLO1,2,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.
2017		CLO2-PLO1,2,4,5-ILO1,2,3	
		CLO3-PLO1,2,4,5-ILO1,2,3	CLO2 100% of the students assessed performed at the proficiency level.
		CLO4-PLO1,2,3,4,5- ILO1,2,3	CLO3 100% of the students assessed performed at the proficiency level.
		CLOS DLO1 2 4 5 H O1 2 2	CLOA 1000/ of the students assessed menformed at the
		CLO5-PLO1,2,4,5-ILO1,2,3	CLO4 100% of the students assessed performed at the proficiency level.
			CLO5 100% of the students assessed performed at the
			proficiency level.
Spring	SE123	CLO1-PLO1,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the
2017		CLO2-PLO1,4,5-ILO1,2,3	proficiency level.
		CLO3-PLO1,4,5-ILO1,2,3	CLO2 100% of the students assessed performed at the proficiency level.
		CLO3-FLO1,4,3-ILO1,2,3	
			CLO3 100% of the students assessed performed at the proficiency level.
Spring 2017	SE124	CLO1-PLO1,5-ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.
		CLO2-PLO1,4,5-ILO1,2,3	
			CLO2 100% of the students assessed performed at the proficiency level.
	<u> </u>	1	11/ :

Spring 2017	SE221	CLO1-PLO1,2,4,5-ILO1,2,3 CLO2-PLO1,2,4,5-ILO1,2,3 CLO3-PLO1,2,4,5-ILO1,2,3 CLO4-PLO1,2,3,4,5- ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.  CLO2 100% of the students assessed performed at the proficiency level.  CLO3 100% of the students assessed performed at the proficiency level.  CLO4 100% of the students assessed performed at the proficiency level.
Spring 2017	SE222	CLO1-PLO1,2,4,5-ILO1,2,3 CLO2-PLO1,2,4,5-ILO1,2,3 CLO3- PLO1,2,4,5- ILO1,2,3 CLO4- PLO1,2,4,5- ILO1,2,3 CLO5-PLO1,2,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.  CLO2 100% of the students assessed performed at the proficiency level.  CLO3 100% of the students assessed performed at the proficiency level.  CLO4 100% of the students assessed performed at the proficiency level.  CLO5 100% of the students assessed performed at the proficiency level.
Summer 2017	SE223	CLO1-PLO1,2,3,4,5- ILO1,2,3,4,5 CLO2-PLO1,2,3,4- ILO1,2,3,4,5,6	CLO1 100% of the students assessed performed at the proficiency level. CLO2 100% of the students assessed performed at the proficiency level.

Year 2: School Year Fall 17- Spring 18

Semester Assessed	Course Assessed	CLO-PLO-ILO Mapping	Results of Assessments
Fall 2017	SE101	CLO1-PLO1-ILO1,2,3,4,5	CLO1 100% of the students assessed performed at the proficiency level.
		CLO2-PLO1-ILO1,2,3,5	CLO2 100% of the students assessed performed at the proficiency level.
		CLO3-PLO1,4-ILO1,2,3,5	
			CLO3 100% of the students assessed performed at the proficiency level.
Fall 2017	SE112	CLO1-PLO 1,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.
		CLO2-PLO1,4,5-ILO1,2,3	
		CLO3-PLO1,4,5-ILO1,2,3	CLO2 100% of the students assessed performed at the proficiency level.

		CLO4-PLO1,4,5-ILO1,2,3	CLO3 100% of the students assessed performed at the proficiency level.  CLO4 100% of the students assessed performed at the proficiency level.
Fall 2017	SE113	CLO1- PLO1,4,5-ILO1,2,3 CLO2-PLO1,4,5-ILO1,2,3 CLO3-PLO1,4,5-ILO1,2,3	CLO1 96% of the students assessed performed at the proficiency level.  CLO2 100% of the students assessed performed at the proficiency level.  CLO3 96% of the students assessed performed at the proficiency level.
Fall 2017	SE212	CLO-PLO1,4,5-ILO1,2,3 CLO2—PLO1,5-ILO1,2,3 CLO3-PLO1,5-ILO1,2,3 CLO4-PLO1,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.  CLO2 100% of the students assessed performed at the proficiency level.  CLO3 100% of the students assessed performed at the proficiency level.  CLO4 100% of the students assessed performed at the proficiency level.
Fall 2017	SE213	CLO1-PLO1,4,5-ILO1,2,3 CLO2-PLO1,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.  CLO2 100% of the students assessed performed at the proficiency level.
Spring 2018	SE122	CLO1-PLO1,2,4,5-ILO1,2,3 CLO2-PLO1,2,4,5-ILO1,2,3 CLO3-PLO1,2,4,5-ILO1,2,3 CLO4-PLO1,2,4,5-ILO1,2,3 CLO5-PLO1,2,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.  CLO2 100% of the students assessed performed at the proficiency level.  CLO3 100% of the students assessed performed at the proficiency level.  CLO4 100% of the students assessed performed at the proficiency level.  CLO5 100% of the students assessed performed at the proficiency level.  CLO5 100% of the students assessed performed at the proficiency level.
Spring 2018	SE123	CLO1-PLO1,4,5-ILO1,2,3 CLO2-PLO1,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.  CLO2 100% of the students assessed performed at the

		CLO3-PLO1,4,5-ILO1,2,3	proficiency level.
			CLO3 100% of the students assessed performed at the proficiency level.
Spring 2018	SE124	CLO1-PLO1,5-ILO1,2,3 CLO2-PLO1,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.  CLO2 100% of the students assessed performed at the proficiency level.
Spring 2018	SE221	CLO1-PLO1,2,4,5-ILO1,2,3 CLO2-PLO1,2,4,5-ILO1,2,3 CLO3-PLO1,2,4,5-ILO1,2,3 CLO4-PLO1,2,3,4,5- ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.  CLO2 100% of the students assessed performed at the proficiency level.  CLO3 100% of the students assessed performed at the proficiency level.  CLO4 100% of the students assessed performed at the proficiency level.
Spring 2018	SE222	CLO1-PLO1,2,4,5-ILO1,2,3 CLO2-PLO1,2,4,5-ILO1,2,3 CLO3- PLO1,2,4,5-ILO1,2,3 CLO4- PLO1,2,4,5-ILO1,2,3 CLO5-PLO1,2,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.  CLO2 100% of the students assessed performed at the proficiency level.  CLO3 100% of the students assessed performed at the proficiency level.  CLO4 100% of the students assessed performed at the proficiency level.  CLO5 100% of the students assessed performed at the proficiency level.

Year 3: School Year 18-19

Semester Assessed	Course Assessed	CLO-PLO-ILO Mapping	Results of Assessments
Fall 2018	SE101	CLO1-PLO1-ILO1,2,3,4,5	CLO1 100% of the students assessed performed at the proficiency level.
		CLO2-PLO1-ILO1,2,3,5	CLO2 100% of the students assessed performed at the proficiency level.
		CLO3-PLO1,4-ILO1,2,3,5	CLO3 100% of the students assessed performed at the proficiency level.

Fall 2018	SE112	CLO1-PLO 1,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.
		CLO2-PLO1,4,5-ILO1,2,3	CLO2 100% of the students assessed performed at the
		CLO3-PLO1,4,5-ILO1,2,3	proficiency level.
		CLO4-PLO1,4,5-ILO1,2,3	CLO3 100% of the students assessed performed at the proficiency level.
			CLO4 100% of the students assessed performed at the proficiency level.
Fall 2018	SE113	CLO1-PLO1,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.
		CLO2-PLO1,4,5-ILO1,2,3	. ,
		CLO3-PLO1,4,5-ILO1,2,3	CLO2 100% of the students assessed performed at the proficiency level.
			CLO3 100% of the students assessed performed at the proficiency level.
Fall 2018	SE212	CLO1-PLO1,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.
		CLO2—PLO1,5-ILO1,2,3	
		CLO3-PLO1,5-ILO1,2,3	CLO2 100% of the students assessed performed at the proficiency level.
		CLO4-PLO1,4,5-ILO1,2,3	CLO3 100% of the students assessed performed at the proficiency level.
			CLO4 100% of the students assessed performed at the proficiency level.
Fall 2018	SE213	CLO1-PLO1,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.
		CLO2-PLO1,4,5-ILO1,2,3	
			CLO2 100% of the students assessed performed at the proficiency level.
Spring 2019	SE122	CLO1-PLO1,2,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.
		CLO2-PLO1,2,4,5-ILO1,2,3	
		CLO3-PLO1,2,4,5-ILO1,2,3	CLO2 100% of the students assessed performed at the proficiency level.
		CLO4-PLO1,2,3,4,5- ILO1,2,3	CLO3 100% of the students assessed performed at the proficiency level.
		CLO5-PLO1,2,4,5-ILO1,2,3	CLO4 100% of the students assessed performed at the proficiency level.
			CLO5 100% of the students assessed performed at the

			proficiency level.
Spring 2019	SE123	CLO1-PLO1,4,5-ILO1,2,3 CLO2-PLO1,4,5-ILO1,2,3 CLO3-PLO1,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.  CLO2 100% of the students assessed performed at the proficiency level.  CLO3 100% of the students assessed performed at the proficiency level.
Spring 2019	SE124	CLO1-PLO1,5-ILO1,2,3 CLO2-PLO1,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.  CLO2 100% of the students assessed performed at the proficiency level.
Spring 2019	SE221	CLO1-PLO1,2,4,5-ILO1,2,3 CLO2-PLO1,2,4,5-ILO1,2,3 CLO3-PLO1,2,4,5-ILO1,2,3 CLO4- PLO1,2,3,4,5ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.  CLO2 100% of the students assessed performed at the proficiency level.  CLO3 100% of the students assessed performed at the proficiency level.  CLO4 100% of the students assessed performed at the proficiency level.
Spring 2019	SE222	CLO1-PLO1,2,4,5-ILO1,2,3 CLO2-PLO1,2,4,5-ILO1,2,3 CLO3- PLO1,2,4,5- ILO1,2,3 CLO4- PLO1,2,4,5- ILO1,2,3 CLO5-PLO1,2,4,5-ILO1,2,3	CLO1 100% of the students assessed performed at the proficiency level.  CLO2 100% of the students assessed performed at the proficiency level.  CLO3 100% of the students assessed performed at the proficiency level.  CLO4 100% of the students assessed performed at the proficiency level.  CLO5 100% of the students assessed performed at the proficiency level.
Summer 19	SE223	CLO1,2-PLO1,2,3,4,5	CLO1 100% of the students assessed performed at the proficiency level. CLO2 80% of the students assessed performed at the proficiency level.

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

Over the three year assessment period from fall 2016 to summer 2019, most students reached the proficiency level with the course learning outcomes. Courses that had a rating of below 70% were few and not all the course learning outcome proficiency levels were below 70%. In fall 2016, only one CLO for only one course and that is SE113, CLO1, was below the 70% benchmark. At this time this particular course was assessed by using written assessment tools as final exam. In fall 2018, the instructor changed the assessment tools to assess skills deeming it more important to assess the actual skills acquired, and this time the result went above the bench mark of 70% to 100%. The Small Engine Program will be remaining using hands on skills sheet for assessment tools.

#### V. Program Learning Outcomes (PLOs) Assessment

Program Learning Outcomes Assessment Results

Year	PLO	Proficiency Levels	Results of Assessments
Assessed	Assessed	-	
S.Y F16-	PLO1	SE112:CLO1,2,3,4:100%	98% of students assessed performed at the proficiency
Sp17		SE 113:CLO1,2,3: 75%	level. The expected outcome of 70% was met. SE
		SE212: CLO1,2,3,4:100%	program will continue to offer program courses as they
		SE213: CLO1,2:100%	are, continue to assess the program courses, and will
		SE122:CLO1,2,3,4,5:100%	make any changes when need arise. Changes and
		SE 123:CLO1,2,3:100%	implementation will continue to be based on course
		SE124:CLO1,2:100%	assessment results and data.
		SE221: CLO1,2,3,4:100%	
		SE222:CLO1,2,3,4,5:100%	
		SE223:CLO1,2:100%	
	PLO2	SE 122:CLO1,2,3,4:100%	100% of students assessed performed at the
		SE22:11,2,3,4:100%	proficiency level. The expected outcome of 70% was
		SE222:CLO1,2,3,4,5:100%	met. SE program will continue to offer program
		SE 223:CLO1,2: 100%	courses as they are, continue to assess the program
			courses, and will make any changes when need arise.
			Changes and implementation will continue to be based
			on course assessment results and data.

	DI O2	SE 122: CL O4:1000/	1000/ of starlants account a sufamount at the
	PLO3	SE 122: CLO4:100%	100% of students assessed performed at the
		SE221:CLO4:100%	proficiency level. The expected outcome of 70% was
		SE223:CLO1,2:100%	met. SE program will continue to offer program
			courses as they are, continue to assess the program
			courses, and will make any changes when need arise.
			Changes and implementation will continue to be based
			on course assessment results and data.
	PLO4	SE112:CLO1,2,3:100%	98% of students assessed performed at the proficiency
		SE113:1,2,3:75%	level. The expected outcome of 70% was met. SE
		SE212CLO1,4:100%	program will continue to offer program courses as they
		SE213:CLO1,2:100%	are, continue to assess the program courses, and will
		SE122:CLO1,2,3,4,5:100%	make any changes when need arise. Changes and
		SE123CLO1,2,3:100%	implementation will continue to be based on course
		SE124:CLO2:100%	assessment results and data.
		SE222:CLO1,2,3,4,5:100%	
		SE223:CLO1,2:100%	
	PLO5	SE112:CLO1,2,3,4:100%	97% of students assessed performed at the proficiency
		SE113:CLO1,2,3:75%	level. The expected outcome of 70% was met. SE
		SE212:CLO1,2,3,4:100	program will continue to offer program courses as they
		SE213:CLO1,2:100%	are, continue to assess the program courses, and will
		SE122:ClO1,2,3,4,5:100%	make any changes when need arise. Changes and
		SE123:CLO1,2,3:100%	implementation will continue to be based on course
		SE124:CLO1,2:100%	assessment results and data.
		SE221:CLO1,2,3,4:100%	
		SE222:CLO1,2,3,4,5:100	
		SE223:CLO1:100%	
S.Y F17-	PLO1	SE101:CLO1,2,3:100%	99% of students assessed performed at the proficiency
Sp18		SE112:CLO1,2,3,4:100%	level. The expected outcome of 70% was met. SE
_		SE113:CLO1,2,3:99%	program will continue to offer program courses as they
		SE212:CLO1,2,3,4:100%	are, continue to assess the program courses, and will
		SE213:CLO1,2:100%	make any changes when need arise. Changes and
		SE122:CLO1,2,3,4,5:100%	implementation will continue to be based on course
		SE123:CLO1,2,3:100%	assessment results and data.
		SE124:CLO1,2:100%	
		SE221:CLO1,2,3,4:100%	
		SE222:CLO1,2,3,4,5:100%	
	PLO2	SE122:CLO1,2,3,4,5:100%	100% of students assessed performed at the
		SE221:CLO1,2,3,4:100%	proficiency level. The expected outcome of 70% was
		SE222:CLO1,2,3,4,5:100%	met. SE program will continue to offer program
			courses as they are, continue to assess the program
			courses, and will make any changes when need arise.
			Changes and implementation will continue to be based
			on course assessment results and data.
	PLO3	SE101:CLO1,2,3:100%	100% of students assessed performed at the
		SE112:CLO4:100%	proficiency level. The expected outcome of 70% was
			met. SE program will continue to offer program
			courses as they are, continue to assess the program
			courses, and will make any changes when need arise.
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			Changes and implementation will continue to be based
			Changes and implementation will continue to be based on course assessment results and data.

		SE112:CLO1,2,3:100% SE113:CLO1,2,3:99% SE212CLO1,4:100% SE213:CLO1,2:100% SE122:CLO1,2,3,4,5:100% SE123:CLO1,2,3:100% SE124:CLO2:100% SE221:CLO1,2,3,4:100% SE222:CLO1,2,3,4,5:100%	level. The expected outcome of 70% was met. SE program will continue to offer program courses as they are, continue to assess the program courses, and will make any changes when need arise. Changes and implementation will continue to be based on course assessment results and data.
	PLO5	SE101:CLO1,2,3:100% SE112:CLO1,2,3,4:100% SE113:CLO1,2,3:99% SE212:CLO1,2,3,4:100% SE213:CLO1,2:100% SE122:CLO1,2,3,4,5:100% SE123:CLO1,2,3:100% SE124:CLO1,2:100% SE221:CLO1,2,3,4:100% SE222:CLO1,2,3,4,5:100%	99% of students assessed performed at the proficiency level. The expected outcome of 70% was met. SE program will continue to offer program courses as they are, continue to assess the program courses, and will make any changes when need arise. Changes and implementation will continue to be based on course assessment results and data.
S.Y F18- Sp19	PLO1	SE101CLO1,2,3:100% SE112CLO1,2,3,4:100% SE113CLO1,2,3:100% SE212CLO1,2,3,4:100% SE213CLO1,2:100% SE122CLO1,2,3,4,5:100% SE123CLO1,2,3:100% SE124CLO1,2:100% SE221CLO1,2,3,4:100% SE221CLO1,2,3,4:100% SE223CLO1,2:90%	99% of students assessed performed at the proficiency level. The expected outcome of 70% was met. SE program will continue to offer program courses as they are, continue to assess the program courses, and will make any changes when need arise. Changes and implementation will continue to be based on course assessment results and data.
	PLO2	SE122:CLO1,2,3,4,5:100% SE221:CLO1,2,3,4:100% SE222:CLO1,2,3,4,5:100% SE223CLO1,2:90%	97% of students assessed performed at the proficiency level. The expected outcome of 70% was met. SE program will continue to offer program courses as they are, continue to assess the program courses, and will make any changes when need arise. Changes and implementation will continue to be based on course assessment results and data.
	PLO3	SE 122: CLO4:100% SE221:CLO4:100% SE223:CLO1,2:90%	97% of students assessed performed at the proficiency level. The expected outcome of 70% was met. SE program will continue to offer program courses as they are, continue to assess the program courses, and will make any changes when need arise. Changes and implementation will continue to be based on course assessment results and data.
	PLO4	SE101:CLO3:100% SE112:CLO1,2,3:100% SE113:CLO1,2,3:100% SE212CLO1,4:100% SE213:CLO1,2:100%	99% of students assessed performed at the proficiency level. The expected outcome of 70% was met. SE program will continue to offer program courses as they are, continue to assess the program courses, and will make any changes when need arise. Changes and

		SE122:CLO1,2,3,4,5:100% SE123:CLO1,2,3:100% SE124:CLO2:100% SE221:CLO1,2,3,4:100% SE222:CLO1,2,3,4,5:100% SE223 CLO1,2:90%	implementation will continue to be based on course assessment results and data.
	PLO5	SE101:CLO1,2,3:100% SE112:CLO1,2,3,4:100% SE113:CLO1,2,3:100% SE212:CLO1,2,3,4:100% SE213:CLO1,2:100% SE122:CLO1,2,3,4,5:100% SE123:CLO1,2,3:100% SE124:CLO1,2:100% SE221:CLO1,2,3,4:100% SE221:CLO1,2,3,4:100% SE222:CLO1,2,3,4,5:100% SE223CLO1,2:90%	99% of students assessed performed at the proficiency level. The expected outcome of 70% was met. SE program will continue to offer program courses as they are, continue to assess the program courses, and will make any changes when need arise. Changes and implementation will continue to be based on course assessment results and data.

Provide Summary of Program Learning Outcomes Assessments and analysis results 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.

Of the 5 PLOs, all of them were assessed and reach above the 70% benchmark. PLOs and CLOs will be continue using this assessment tools (rating skills).

#### VI. Evaluation of Previous Program Review Action Plan(s)

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

Cycle: Years:	
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Action Plan	Status	Updates of Action Plan/s
Activity/Objectives	Complete/Ongoing/Incomplete	(Report action plan individually.)
To obtain visual and		Visual and audio aids were obtained and the
audio teaching aids.	Ongoing	instructor continues to search for additional
		technology and visual teaching aids.
Upgrade faculty	Complete	Chairperson and instructional assistant both
through training,		received training in Japan for Yamaha
seminar, or online		engines and also NCCER instructor training.
trainings.		Additional training will be requested as
		needed. Both faculty were also in the
		process of preparing to enroll in a 4 year
		degree program by taking necessary PCC
		courses required for the online bachelor's
		program. Since one faculty resigned, there is
		now one preparing for the bachelor's

		program.
To attend high	Not completed	Training in other engine types (Mercury,
technology OMC		Evinrude, etc.) is not yet available.
training.		

Provide Summary of the Evaluation of Previous Program Review Action Plans and analysis results 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; provide a detailed explanation of action plans that are ongoing and plans that are incomplete.

Using visual and audio aids has helped students reach the proficiency benchmark for most course and program learning outcomes. Faculty intends to continue using available aids and also to search for more aids to continue using these types of aids.

Faculty is using the training information gained from both the Yamaha company in Japan and NCCER to assist with instruction of course and program outcomes. Instructors have found that students grasp concepts better when visual and audio aids are used.

Faculty are waiting for the Dean of Academic Affairs to request training needs for other types of engines (Mercury and Evinrude) through the companies on island.

#### VII. 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	How will this action plan improve	Needed Resources	Timeline
Activity/Objectives	student learning outcomes?	(if any)	
	(CLO, PLO, ILO)		
Build a transom out of	This will assist students in gaining	plywood	Spring 2022
plywood for the lab.	practice with PLO 3.		
Purchase a Green	This will assist students in SE113.	(approximately \$500)	Fall 2022
Machine TU 26	Students need to take apart the		
	engine and put it back together		
	again		
Purchase a Yamaha	This will help SE112, 122, 123,	40 hp 4 stroke engine	Purchase a
40hp 4 stroke engine	124, SE 212, 213, 221, and 222	(approximately \$15,000)	Yamaha
	students gain knowledge and skills		40hp 4 stroke
	and become proficient in the		engine
	CLOs of the courses and the PLOs		
	of the SE program.		

Continue request for training in engines, especially those other than Yamaha.	Students will be trained in engines other than Yamaha which are becoming more common now in Micronesia. The CLOs and PLOs apply to all types of engines.	Travel and training expense	Summer 2023
Continue to complete PCC courses for preparation of SDSU bachelor's program.	The SDSU bachelor's program will assist faculty in learning teaching strategies which will in turn help students gain knowledge and skills in the CLOs and PLOs of the program.	Tuition cost	Ongoing

Provide Summary of <u>Action Plans</u> 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.

Students who graduate from the SE program have acquired the knowledge and skills to succeed in the field. Many students are hired at the place where they completed their internships and supervisors of the students are pleased with the skills and attitudes that interns display. One of the strengths of the program is having full instructors with work experience. These instructors are aware of the knowledge, skills and attitudes that outboard marine repair shops are seeking for their employees and students do well in the internship course because these instructors are using this knowledge when instructing the SE students.

The program has a need for a transom as indicated in the action plan. This is needed so that students can practice boat fitting and rigging. This is tied to PLO 3 where proficiency is not always reached.

A Green Machine TU26 is needed so that when students put the engine back together after they take it apart, they will know if it has been done properly if it starts. Students currently practice on broken machines which do not run and are not often repairable. Therefore, it is best to have one that is not brought in by a customer which may not be able to be repaired or may be further damaged by students inexperienced.

A 40 hp 4 stroke engine is needed for students to practice skills to reach proficiency with the course CLOs. (SE112, 122, 123, 124, SE 212, 213, 221, and 222). This will also help them gain proficiency with the program learning outcomes.

Ongoing training and education for the faculty will assist the faculty with keeping updated in the field and also improve their teaching methods.

Based on the action plans, the program needs to purchase plywood for the transom, a Green Machine TU26, and a 40hp 4 stroke engine. The other expenses will be for training.

### **VIII. Resource Requests**

Itemize resource request below.

Type of Resource	Detailed Description	Estimated Amount Requested	Justification
Personnel		•	
Facilities			
Equipment	F 40 or F150 Yamaha outboard motor with digital Tachometer 6y9  Purchase a Green Machine TU 26	\$15,000.00	This outboard motor F150 will be used for demonstration inside the lab. Student will use to learn all the specific parts for four stroke including all kinds of sensors requires for four stroke engine. They will learn how to troubleshoot the defect, tune up and do the adjustment on the timing belt with the camshaft.  A Green Machine TU26 is needed so that when students put the engine back together after they take it apart, they will know if it has been done properly if it starts. Students currently practice on broken machines which do not run and are not often repairable.
Supplies	Routine classroom materials Kerosene, Gasoline & oils	\$300 \$800	Since solvent is not available this program is using Kerosene for cleaning engine parts, It is safe for students and also one of the OSHA rule of safety to always use solvent or kerosene for cleaning the engine parts and never use gasoline.  Gasoline is also needed for small engine shop. Small Engine students are require to service, troubleshoot and test run the
			engine either two stroke engine or four stroke engine.
Software			Stoke eligilie.
Training	Continue request for training in engines, especially those other than Yamaha.	Training cost	These engines are now frequently being bought so students need to be proficient sills in engines other than Yamaha.
Other	The SDSU bachelor's program will assist faculty in learning teaching strategies which will in turn help	Tuition cost - \$25, 000	The instructor will learn skills in others areas, such as assessment and teaching methods.

	students gain knowledge and skills in the CLOs and PLOs of the program.	
Total		

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.

As of today, most engines are upgraded to four cycle engines or four stroke engines which means two stroke engines will soon be no longer in service. Small Engine and Outboard Marine Technology program needs to upgrade to the next level of learning which is to have a 4 stroke engine which will be helpful for the instructor to deliver the skills or knowledge to current and future in order for them to be knowledgeable regarding four stroke engines and engine makes other than Yamaha. The course and program learning outcomes will align with these engines.

The grass cutter (Green Machine)ia needed for SE113 learning outcomes and program learning outcomes.

Trainings and the advanced degree will allow the instructor to acquired skills and knowledge to add on to what the instructor already has. This in turn will help the instructor prepare students for proficiency in the course and program learning outcomes.