



"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 Departments
(Academic Departments)
Three Year Program Review**

Computer Science Department

Fall 2015 – Summer 2018

Program Review Completed By:

Name	Title	Signature	Date
Suzette Garcia Hinojales	Computer Science Department Chair	<i>[Signature]</i>	FEB 1 2019

Program Review Certified By:

Name	Title	Signature	Date
ROBERT RAMARUU	DEAN ACADEMIC AFFAIRS	<i>[Signature]</i>	2/1/19

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

Name	Title	Signature	Date
LIGAYA SARA	INSTITUTIONAL RESEARCH	<i>[Signature]</i>	2/1/19

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 – GE/ILOs Mapping (e-copy only)

Appendix B: Most Updated & Approved Outlines within this cycle (e-copy only)

Appendix C: FAMED grid of all course assessment data within review cycle
(e-copy in pdf 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 Department Purpose and Relationship to the College Mission

1. State the mission of this academic department below.

Computer Science Department is established with three courses which are Computer Literacy, Microcomputer Application and Desktop Publishing. This department is designed to introduce students with basic knowledge and skills needed in the world of technology. The students will be initiated to basic instruction with the use of Microsoft Office applications such as: Word, Excel, Access, Power point, Publisher and Adobe Photoshop. The Computer Science Department will help students be familiarized on the components of the computer and introduce how applications work. With this department they will be able to input data on the computer for school work and for employment purpose.

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

PCC MISSION STATEMENT:

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.

The Computer Science Department bonds with the PCC Mission Statement by helping meet the technical, academic, cultural, social, and economic needs of students and communities by promoting learning opportunities and developing personal excellence. To meet the technical needs, students are able to learn hands-on with the computer on how to move to and from within the computer and its applications. Students will be able to learn not only from the book but with practical exercises that will let them understand the purpose of every icons of the computer to meet their academic needs. While on the other hand, students will be able to input ideas, news, enhance photograph into the computer for their cultural, social, and economic issues. This Cs Department helps by promoting learning opportunities to students who needs knowledge in computers which is needed in most Profession nowadays.

3. Provide a brief history of this academic department below. Include the updates of major changes and accomplishments since the last review.

The Computer Science Department continues to review and update each course learning outcomes and course outline to ensure the effectiveness of each course offered to students that are useful in the workforce.

II. Student and Faculty Data

Figure 1 – Course Completion Data

You may insert more rows as needed

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

FA 2015					FA 2016					FA 2017				
<u>Course</u>	Passed	Failed	Withdraw	Enrolled	<u>Course</u>	Passed	Failed	Withdraw	Enrolled	<u>Course</u>	Passed	Failed	Withdraw	Enrolled
CS 100	70	22	8	100	CS 100	105	22	12	139	CS 100	87	10	6	103
CS 213	12	1	7	20	CS 213	10	2	1	13	CS 213	7	0	1	8

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

SP 2016					SP 2017					SP 2018				
<u>Course</u>	Passed	Failed	Withdraw	Enrolled	<u>Course</u>	Passed	Failed	Withdraw	Enrolled	<u>Course</u>	Passed	Failed	Withdraw	Enrolled
CS 100	75	12	9	96	CS 100	90	18	10	118	CS 100	51	16	13	80
CS 212	3	4	1	8	CS 212	10	0	4	14	CS 212	3	0	0	3

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

SU 2016					SU 2017					SU 2018				
Course	Passed	Failed	Withdraw	Enrolled	Course	Passed	Failed	Withdraw	Enrolled	Course	Passed	Failed	Withdraw	Enrolled
CS 100	39	1	0	40	CS 100	26	4	0	30	CS 100	35	3	0	38

Provide Summary of Tables 1a, 1b & 1c including its trends analysis below.

Looking into a school year cycle during Fall semester most of the student enrolls into the course but as the semesters goes by the enrollment decreases during Spring and summer.

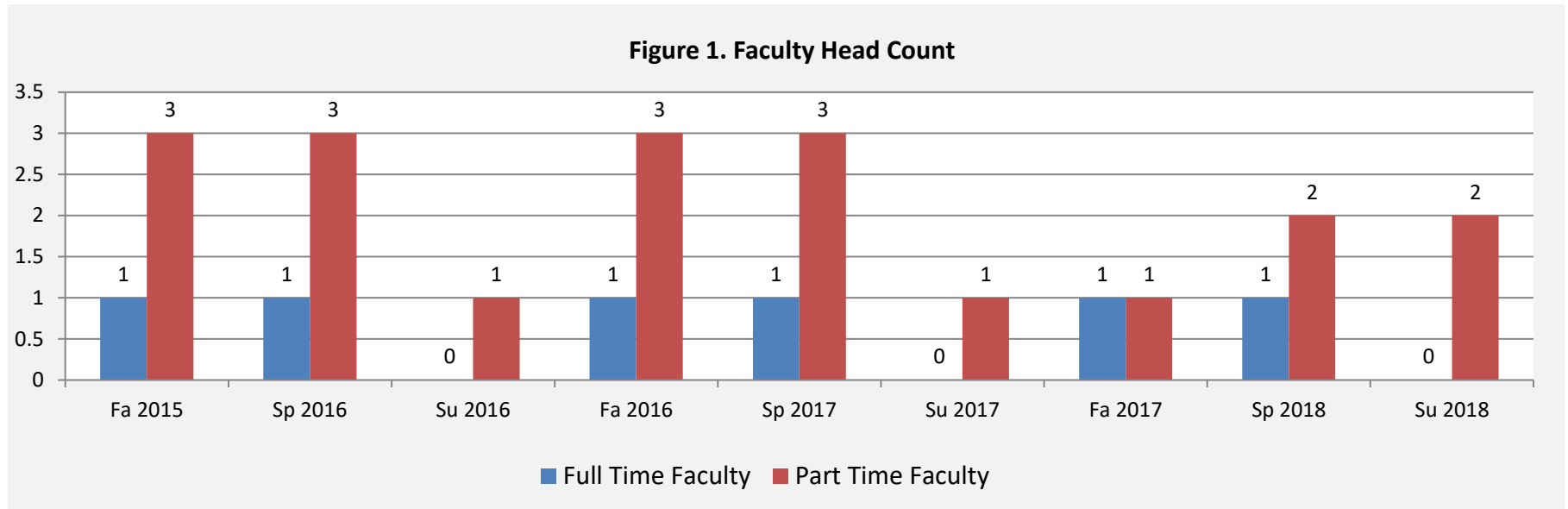
In Fall Semesters CS 100 student passing rate increased with 14.46% from 70.00% to 84.46%
 Spring Semesters CS 100 Decreased with 14.38% from 78.13% to 63.75%
 Summer Semester Cs 100 gradually decreased with 5.39% from 97.50 % to 92.11%

CS 100 analysis on student passing rate during Fall semester reached 76.65% while during spring semester has 72.72% and summer semester has 92.09%, Although we have been reaching the 70% proficiency rate for all the semesters we need to carefully analyze the reason why students fail/withdraw the class during Spring semester.

Comparing data from fall semester CS 213 Desktop Publishing passing rate increased by 27.50% from Fall 2015: 60.00% to Fall 2017: 87.50 %. Although we had reached the 70% proficiency rate for 2 semesters we need to carefully analyze the reason why students fail/withdraw and why only a few students enroll at these course.

Comparing data from spring semester, CS 212 passing rate increased by 62.50% from Spring 2016: 37.50% to Spring 2018 100%. Although we had reached the 70% proficiency rate for 2 semesters we need to carefully analyze why there are less students who are taking the course.

Figure 1 – Faculty Information



Provide summary of Figure 1 including its trends analysis below.

Majority of the instructors are part-time instructors to the courses under Computer Science Department. It would be beneficial to have majority of the instructors to be full time instructors to focus on student success that would be able to understand the capabilities of students and improve the course.

III. Student Learning and Curriculum

School Year	How many department courses are there? (refer to catalog or most recent approval by CPC)	% of courses with Identified CLOs	List all revised department courses outlines or proposed new courses that received CPC approval within this review cycle	% of CLOs aligned with GE/ILOs
2015-2016	3	100%	100%	100%
2016-2017	3	100%	100%	100%
2017-2018	3	100%	100%	100%

Provide Summary of Student Learning and Curriculum in the box below. Summary should include reasons for course revisions and course proposals. If any course went through the validity process during this cycle, include the information here.

For CS 212 Microcomputer Application & CS 213 Desktop Publishing was a 3 year update which adapted the 4 rating scales and revisited the Course Learning Outcomes.

CS 100 was modified because we had created Computer Literacy: Using Microsoft Office workbook which started during Fall 2016, adapted the 4 rating scale and revisited the Course Learning Outcome.

IV. Course Assessment Data

Year 1: School Year **2015-2016**

Semester Assessed	Course Assessed	CLO-GE/ILO Mapping	Results of Assessments (Do not combine CLO results; report individual CLO result.)
Fall 2015	CS 100	CLO 1-5 – GE/ILO 1,2,3,5,6	CLO 1: 94% of students pass with at least 70%
		CLO 1-5 – GE/ILO 1,2,3,5,6	CLO 2: 86% of students pass with at least 70%
		CLO 1-5 – GE/ILO 1,2,3,5,6	CLO 3: 86% of students pass with at least 70%
		CLO 1-5 – GE/ILO 1,2,3,5,6	CLO 4: 63% of students pass with at least 70%
		CLO 1-5 – GE/ILO 1,2,3,5,6	CLO 5: 94% of students pass with at least 70%
		CLO 1-5 – GE/ILO 1,2,3,5,6	CLO 6: 80% of students pass with at least 70%
	CS 213	CLO 1-4 – GE/ILO 1,2,3,5,6	CLO 1: 78% of students pass with at least 70%
		CLO 1-4 – GE/ILO 1,2,3,5,6	CLO 2: 89% of students pass with at least 70%

		CLO 1-4 – GE/ILO 1,2,3,5,6	CLO 3: 89% of students pass with at least 70%
		CLO 1-4 – GE/ILO 1,2,3,5,6	CLO 4: 89% of students pass with at least 70%
			CLO 5: 89% of students pass with at least 70%
			CLO 6: 89% of students pass with at least 70%
Spring 2016	CS 212	CLO 1-5 – GE/ILO 1,3,5	CLO 1: 100% of the student assessed reached proficiency level
		CLO 1-5 – GE/ILO 1,3,5	CLO 2: 100% of the student assessed reached proficiency level
		CLO 1-5 – GE/ILO 1,3,5	CLO 3: 75% of the student assessed reached proficiency level
		CLO 1-5 – GE/ILO 1,3,5	CLO 4: 75% of the student assessed reached proficiency level
		CLO 1-5 – GE/ILO 1,3,5	CLO 5: 75% of the student assessed reached proficiency level

Year 2: School Year **2016-2017**

Semester Assessed	Course Assessed	CLO-GE/ILO Mapping	Results of Assessments (Do not combine CLO results; report individual CLO result.)
Fall 2016	CS 100	CLO 1-5 – GE/ILO 1,2,3,5,6	CLO 1: 89.92% of the student assessed reached proficiency level
		CLO 1-5 – GE/ILO 1,2,3,5,6	CLO 2: 91.92% of the student assessed reached proficiency level
		CLO 1-5 – GE/ILO 1,2,3,5,6	CLO 3: 80.17% of the student assessed reached proficiency level
		CLO 1-5 – GE/ILO 1,2,3,5,6	CLO 4: 96% of the student assessed reached proficiency level
		CLO 1-5 – GE/ILO 1,2,3,5,6	CLO 5: 94.5% of the student assessed reached proficiency level
	CS 213	CLO 1-4 – GE/ILO 1,2,3,5,6	CLO 1: 100% of the student assessed reached proficiency level
		CLO 1-4 – GE/ILO 1,2,3,5,6	CLO 2: 100% of the student assessed reached proficiency level
		CLO 1-4 – GE/ILO 1,2,3,5,6	CLO 3: 100% of the student assessed reached proficiency level
		CLO 1-4 – GE/ILO 1,2,3,5,6	CLO 4: 100% of the student assessed reached proficiency level
Spring 2017	CS 212	CLO 1-5 – GE/ILO 1,3,5	CLO 1: 82% of the student assessed performed at the proficiency level
		CLO 1-5 – GE/ILO 1,3,5	CLO 2: 91% of the student assessed performed at the proficiency level
		CLO 1-5 – GE/ILO 1,3,5	CLO 3: 100% of the student assessed performed at the proficiency level

		CLO 1-5 – GE/ILO 1,3,5	CLO 4: 89% of the student assessed performed at the proficiency level
		CLO 1-5 – GE/ILO 1,3,5	CLO 5: 78% of the student assessed performed at the proficiency level

Year 3: School Year **2017-2018**

Semester Assessed	Course Assessed	CLO-GE/ILO Mapping	Results of Assessments (Do not combine CLO results; report individual CLO result.)
Fall 2017	CS 100	CLO 1-5 – GE/ILO 1,2,3,5,6	CLO 1: 81.94% of the student assessed performed at the proficiency level
		CLO 1-5 – GE/ILO 1,2,3,5,6	CLO 2: 98.70% of the student assessed performed at the proficiency level
		CLO 1-5 – GE/ILO 1,2,3,5,6	CLO 3: 87.01% of the student assessed performed at the proficiency level
		CLO 1-5 – GE/ILO 1,2,3,5,6	CLO 4: 100% of the student assessed performed at the proficiency level
		CLO 1-5 – GE/ILO 1,2,3,5,6	CLO 5: 100% of the student assessed performed at the proficiency level
	CS 213	CLO 1-4 – GE/ILO 1,2,3,5,6	CLO 1: 100% of the student assessed performed at the proficiency level
		CLO 1-4 – GE/ILO 1,2,3,5,6	CLO 2: 100% of the student assessed performed at the proficiency level
		CLO 1-4 – GE/ILO 1,2,3,5,6	CLO 3: 100% of the student assessed performed at the proficiency level
		CLO 1-4 – GE/ILO 1,2,3,5,6	CLO 4: 100% of the student assessed performed at the proficiency level
Spring 2018	CS 212	CLO 1-5 – GE/ILO 1,3,5	CLO 1: 100% of the student assessed performed at the proficiency level
		CLO 1-5 – GE/ILO 1,3,5	CLO 2: 100% of the student assessed performed at the proficiency level
		CLO 1-5 – GE/ILO 1,3,5	CLO 3: 100% of the student assessed performed at the proficiency level
		CLO 1-5 – GE/ILO 1,3,5	CLO 4: 100% of the student assessed performed at the proficiency level
		CLO 1-5 – GE/ILO 1,3,5	CLO 5: 100% of the student 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 department learning outcomes, and student learning and achievement.

This Course assessment has led the department to understand the learning behavior of students. One of the underlying causes of student failure has been attendance and learning behavior. These assessment shows that communication skills needs further development and improvement.

CS 100 Assessment data although we have been reaching the proficiency level we need to continue improving the activities & lectures.

CS 212 Assessment data although we have been reaching the proficiency level we need to continue improving the activities & lectures. Students need to be more focus on formatting documents and especially following directions

CS 213 Desktop Publishing Assessment data, although we have been maintaining a proficiency level all throughout the cycle we need to improve activities so students be more enthusiastic.

V. General Education / Institutional Learning Outcomes (GE/ILO) Assessment

Year Assessed	List GE/ILOs	Proficiency Level	Result of Assessments (Do not combine GE/ILO results; report individual GE/ILO result.)
2015-2016	GE/ILO 1	73.44%	In Fall 2015, 65.00% of students assess met the proficiency level while, in Spring 2016, 57.81 % of students assessed met the proficiency level and summer with 97.50% which ended the school year with 73.44% at proficiency level
	GE/ILO 2	73.44%	In Fall 2015, 65.00% of students assess met the proficiency level while, in Spring 2016, 57.81 % of students assessed met the proficiency level and summer with 97.50% which ended the school year with 73.44% at proficiency level
	GE/ILO 3	75.10%	In Fall 2015, 70.00% of students assess met the proficiency level while, in Spring 2016, 57.81 % of students assessed met the proficiency level and summer with 97.50% which ended the school year with 75.10% at proficiency level
	GE/ILO 6	80.21%	In Fall 2015, 65.00% of students assess met the proficiency level while, in Spring 2016, 78.13 % of students assessed met the proficiency level and summer with 97.50% which ended the school year with 80.21% at proficiency level
2016-2017	GE/ILO 1	78.91%	In Fall 2016, 76.21% of students assess met the proficiency level while, in Spring 2017, 73.84% of students assessed met the proficiency level and summer with 86.67% which ended the school year with 78.91% at proficiency level
	GE/ILO 2	78.91%	In Fall 2016, 76.21% of students assess met the proficiency level while, in Spring 2017, 73.84% of students assessed met the proficiency level and summer with 86.67% which ended the school year with 78.91% at proficiency level
	GE/ILO 3	78.67%	In Fall 2016, 75.5% of students assess met the proficiency level while, in Spring 2017, 73.84% of students assessed met the proficiency level and summer 2017 with 86.67% which ended the school year with 78.67% at proficiency level
	GE/ILO 6	79.72%	In Fall 2016, 76.21% of students assess met the proficiency level while, in Spring 2017, 76.27% of students assessed met the proficiency level and summer 2017 with 86.67% which ended the school year with 79.72% at proficiency level

2017-2018	GE/ILO 1	86.65%	In Fall 2017, 85.98% of students assess met the proficiency level while, in Spring 2018, 81.87% of students assessed met the proficiency level and summer 2018 with 92.11% which ended the school year with 86.65% at proficiency level
	GE/ILO 2	86.65%	In Fall 2017, 85.98% of students assess met the proficiency level while, in Spring 2018, 81.87% of students assessed met the proficiency level and summer 2018 with 92.11% which ended the school year with 86.65% at proficiency level
	GE/ILO 3	86.15%	In Fall 2017, 84.46% of students assess met the proficiency level while, in Spring 2018, 81.87% of students assessed met the proficiency level and summer 2018 with 92.11% which ended the school year with 86.15% at proficiency level
	GE/ILO 6	80.61%	In Fall 2017, 85.98% of students assess met the proficiency level while, in Spring 2018, 63.75% of students assessed met the proficiency level and summer 2018 with 92.11% which ended the school year with 80.61% at proficiency level

Provide Summary of GE/ILOs 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 department's student learning and student achievement.

The Institutional Learning Outcome assessment has led the department to understand how the proficiency level increase or decrease in each school year within the cycle. As the school year go by we can see the increase of proficiency level under each Institutional Learning Outcomes. Comparing it from the previous cycle we have improved from a SY 2014-2015 with 66.20%, SY 2015-2016 with 75.55%, SY 2016-2017 with 79.05%, and SY 2017-2018 with 85.01%. These assessment shows that it is important to review each course, lessons and activities to future improve the department and student achievement.

VI. Evaluation of Previous Department Review Action Plan (s)

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

Cycle:	Years: Fall 2012 – Summer 2015
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Action Plan Activity/Objectives	Status Complete/Ongoing/Incomplete	Updates of Action Plan(s) (Report action plans individually.)
Review and update CS Course Outline and CLO	Complete	Will need to revisit the course outline to see if it is still a need for the course to continue or remove the course, as it is a repetition of other courses offered.
Hire additional full-time Faculty that will help improve CS courses and submit required materials	Incomplete	No Update
Upgrade Computer Labs Hardware/Program	Incomplete	No update

Provide Summary of the Evaluation of Previous Department Review Action Plans below. Summary should include what measurable outcomes were achieved due to the actions completed; were the completed actions 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.

<p>Department plan to Review and update all Course outline and CLO was completed under the 3 year update, creating a new textbook for CS 100 Computer Literacy Course, and revisiting the Course learning outcome.</p> <p>Since the submission of the report, there is no feedback on what is needed to be done or updated on the overall report.</p>

VII. Action Plans

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

Action Plan Activity/Objective	How will this action plan improve student learning outcomes? (CLO, GE, ILO)	Needed Resources (if any)	Timeline
Review and update Course Outline and CLO	Review and update will revisit each course to ensure that CLO and CO are up to date, effective and aligned with the colleges standards and expectations	Reference materials, and/or Instructors resources	Fall 2019
Hire additional full-time Faculty that will help improve CS courses and submit required materials	Having a full time instructor for CS department will help improve the teaching quality of the department and be able to improve the success rate of the course	Funding to hire another qualified fulltime CS Instructor	Fall 2019
Upgrade Computer Labs Hardware/Program	To be able to recognize the up-to-date interface of the program. Students will be able to follow the step by step process.	Program Installer's	Fall 2019

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

Computer Science department is established with three courses which are Computer Literacy, Microcomputer Application and Desktop Publishing. This department is designed to introduce students with basic knowledge and skills needed in the world of technology, without the up-to-date technology students will not be able to associate into programs that are use at the offices. Courses offered in the college is accurate but the programs that are installed into the computers are out of date we could not also update our books if the program has not been changed. The instructors of the department had encounter using a Microsoft Office 2010 book with a 2007 Microsoft Office Program that is installed yet there are minor changes but the adjustment for both faculty and students needs to be addressed to meet the technical and academic need. The faculty needs to be equipped with the knowledge and understanding about the coursework and needs to be ready to share their expertise, while helping the students succeed in class.

IX. Resource Request

Itemize resource request below to include resource requests that will support action plans and are data-driven (e.g. course enrollment, course needs, student needs). This section should provide a clear representation of the department's annual budget request.

Type of Resource	Detailed Description	Estimated Amount Requested	Justification
Personnel	Hire an additional qualified fulltime CS faculty with at least a bachelor's degree in CS or a related field	At least \$13,500 per year	There is a need to hire full time faculty to assist in teaching CS courses. CS courses are offered every semester in the college and only part time instructors fill in the position. We need a full time instructor that will help improve CS department and would be able to submit all required files for the improvement of the department. Students must receive the quality of learning through instructors who have good background in CS Courses.
Facility	Btaches Room 67 Computer Lab (Renovate or Relocate)	\$3,600	To ensure the safety of students we need to provide them the appropriate learning environment. Leaking ceiling is not conducive for student learning environment and to ensure the life span of computer that is in the computer lab.
Equipment	Desktop	\$40,000	To equip the 3 computer lab with necessary computers for student learning success. The computers in the computer lab has not been maintained/ or serviced properly. There are 3 computer labs which the computers are now not functioning well.
	Server	\$300	To provide an interactive computer lab for students to practice & learn efficiently.
	Projector	\$1,500	To equip the 3 computer lab with adequate equipment for student learning. To provide an interactive computer lab for students to learn efficiently. (Would recommend to mount the projector into the ceiling)
Supplies	Office Supplies, Deskjet Toner	\$200/Semester	To support teaching and maintain the cleanliness of the computer lab.
Software	Upgrade all Computer Lab Software		To ensure that necessary software are available for students and faculty teaching CS courses.

Training	Microsoft Office Certification	\$2,000	To maintain the department integrity and enhance student learning outcome. To improve new teaching skills for students to learn easily.
Other			
Total			

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

The Computer Science Department bonds with the PCC Mission Statement to meet the technical needs, to learn to and from within the computer as well as not learning from the book only but with practical exercises too. The CS department helps by promoting learning opportunities to students who needs knowledge in computers that is needed in most profession now a days. While the PCC Vision statement says “We guarantee quality and excellence”, we need to provide the best quality of education to students by providing them the appropriate learning environment and an interactive computer lab that is conducive to learning excellence.

To provide the quality of teaching & learning for students success.
 To ensure the safety of students
 To guarantee the students with appropriate learning environment.
 To provide & equip an interactive computer lab for students to learn efficiently.
 To support teaching and maintain the cleanliness of the computer lab.
 To ensure that necessary software are available for students and faculty teaching CS courses.

Based on the results of assessments students enrollment has been decreasing throughout the school year. We need to improve and provide the quality of education that they need so they can be eager to continue and enjoy their education here at Palau Community College which they will benefit for a brighter future.