



"We 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 PROGRAM THREE YEAR REVIEW

Academic Department

Natural Science department

Period of Three Year Review

Spring 2013 to Spring 2015

Completed By:

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Department Instructor(s)

Date: January 28, 2016

Department Chair:

Vernice Yuji

Date: January 28, 2016

Dean of Academic Affairs:

Robert Ramarui

Date: January 28, 2016

Received by Institutional Research Office on:	Date	Name and Initial of receiving personnel
(Provide hard and electronic copy)	02/01/2016	Cigaya Sara SW

Department Review Narrative Summary

Narrative summary:

The Natural Science Department supports the entire college community by providing a wide variety of science courses required for each student's majors, especially the EMS, STEM and Nursing programs. The department also supports the Liberal Arts education and other academic programs and aims to providing students with a solid foundation in a number of disciplines and providing training in scientific methods, technical laboratory skills, and field research techniques. The history of the science department is traced back to 1976, during Micronesian Occupational College (MOC) when it was called natural science department. The department was formed based on three discipline groups and they were: biological, chemical, and physical science. The discipline groups were established to meet the needs of occupational students in the area of science. Subject areas included botany, chemistry, physics, and biology.

Summary of the academic department purpose:

Courses in the natural sciences are designed to prepare students for living and working in a world where science informs both public and private issues. Science courses aim to provide students with a basic understanding of the discipline and to help students explore its theories, principles, models and reasoning processes; to examine the methods and values of the discipline; and to review the historical and cultural context of the discipline and its relation to the wider world of ideas. Natural sciences courses are offered in the fields of biology, chemistry, geology, environmental science and physics and serve students majoring in environmental/marine science as well as those seeking to fulfill their general education requirements for graduation.

The mission of the Department of Natural Sciences is to help students develop a strong science background and critical thinking skills through meaningful in- and out-of-class experiences. The Department aims to provide students with an understanding and appreciation of the natural world from a scientific perspective. The Department of Natural Sciences strives to remain consistent with the educational mission of Palau Community College by helping to meet the technical, academic, cultural, social, and economic needs of students and communities by promoting learning opportunities and developing personal excellence.

- Summary of Department Data
 - a. Figure 1 – Student Status
 - b. Figure 2 – Class Information
 - c. Figure 3 – Course Offering Information
 - d. Figure 4 – Faculty Information
 - e. Table 1 – Faculty to Class Size Ration Information
- Summary of Student Learning and Curriculum
- Summary of Course Assessment Data
 - a. How has assessment of course-level student learning outcomes led to improvement in course-level student learning?
- Summary of Evaluation of Previous Goals/Activities from Previous Cycle
 - a. List actions identified in your last department review or in any other related college plan(s).*
 - b. What measurable outcomes were achieved due to the actions completed?
 - c. Evaluate the success of the completed actions. Did the completed actions lead to improvement of student learning?
 - d. What modifications do you plan to make to the department in the future to improve student learning?

- e. Update major changes/accomplishments since the last review.
- Summary of Department Major Strengths
 - Recommendations for Improvements
 - Does the student assessment data and/or any other college plan indicate overall department needs that may require support from the institution? Define these observed needs supported by assessment data and/or any other college plan.
 - Summary of Action Plans
 - Summary of Resource Request (if any)
 - a. All resource requests should be tied to at least one of the following:
 - An institutional learning outcome
 - A General Education program learning outcome
 - A course learning outcome
 - Other college plans
 - b. What will be the anticipated outcome if resource request is granted?
 - c. Describe the resource request in detail.

*Note: Other college plans may include the 15-Year Institutional Master Plan, the 5 Year Technology Plan, or other plans such as an approved academic department plan or committee plan

Appendix A: Department Review Assessment Data

1.0 Department Data

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

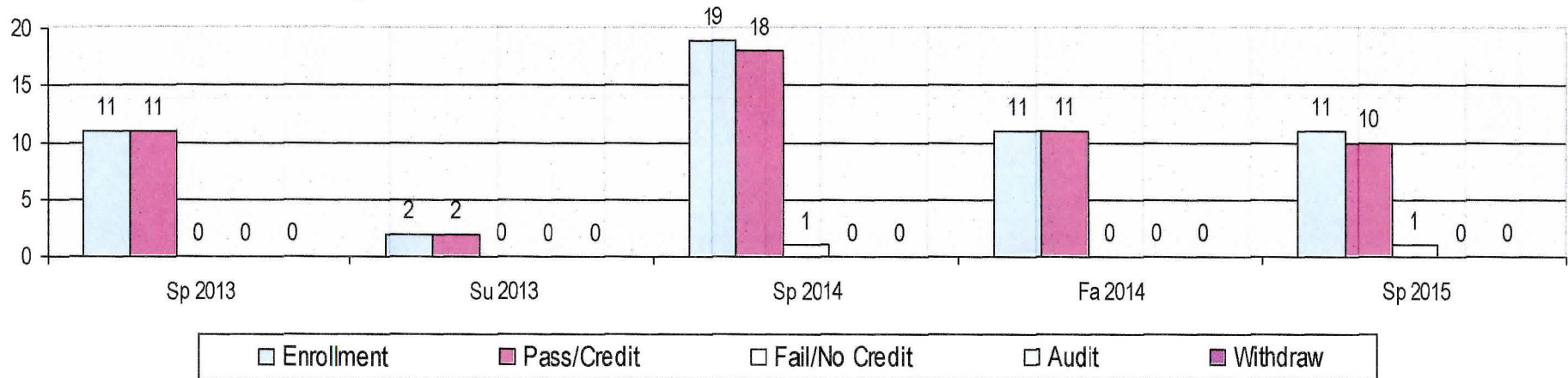


Figure 2. Number Size of Class and Sections Conducted

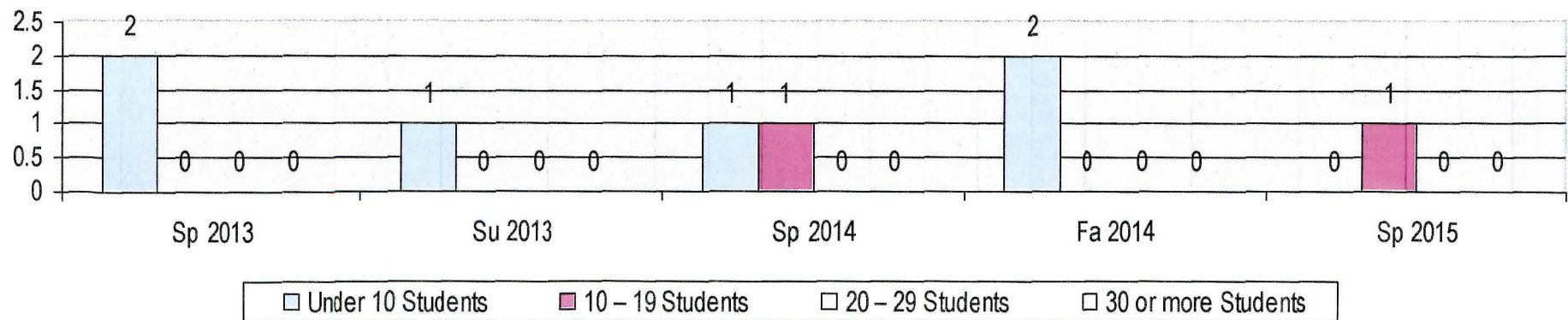


Figure 3. Course Offering

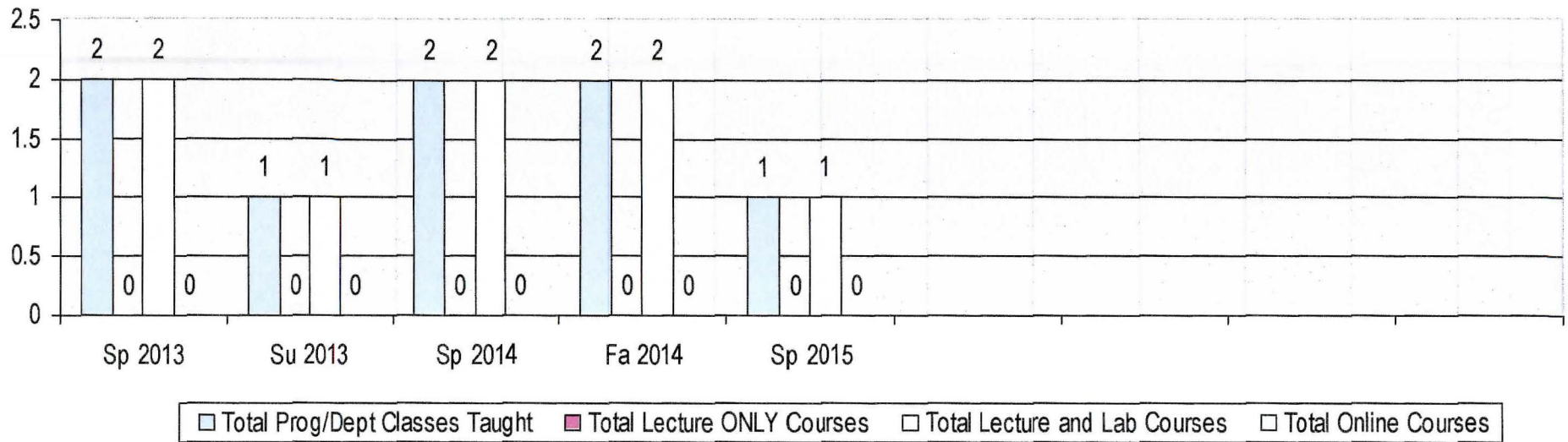


Figure 4. Faculty Head Count

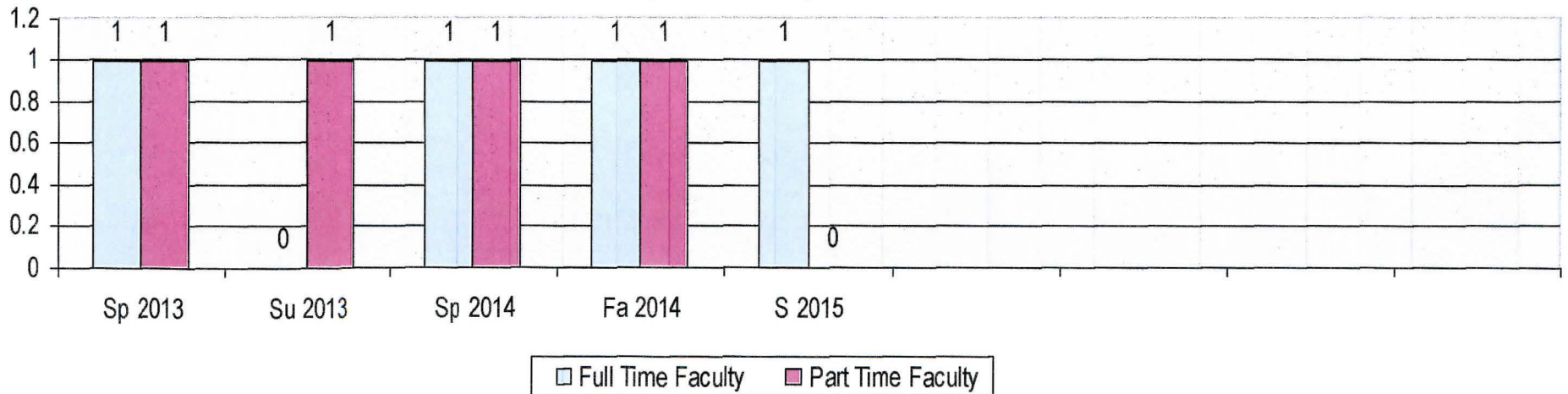


Table 1. Faculty to Class Size Ratio (dept. headcount).

Ratio	Spring 2013	Summer 2013	Spring 2014	Fall 2014	Spring 2015				
Full Time Faculty (F : S)	<u>1:5</u>	<u>—:—</u>	<u>1:4</u>	<u>1:8</u>	<u>1:11</u>				
Part Time Faculty (F : S)	<u>1:6</u>	<u>1:2</u>	<u>1:15</u>	<u>1:3</u>	<u>—:—</u>				

2.0 Student Learning and Curriculum

How many department courses are there? (refer to catalog)	% of courses with Identified CLOs	% of course outlines updated	% of courses whose Textbooks are updated (outline reflects change)	% of CLOs aligned with GE/ILOs
5	100	80	80	80

3.0 Course Assessment Data

Year 1: School Year 2013

Semester Assessed	Course Assessed	CLO – GE/ILO Alignment	Results of Assessments
Spring 2013	SC209	CLO 1-GE/ILO 1,3	100% of students performed at proficiency level for all CLOs.
Spring 2013	SC159A	CLO 1-6 – GE/ILO 1,3	80% of students performed at proficiency level for all CLOs.

Year 2: School Year 2014

Semester Assessed	Course Assessed	CLO – GE/ILO Alignment	Results of Assessments
Spring 2014	SC209	CLO 1-6- GE/ILO 1,3	70% of students performed at proficiency level for all CLO's except CLO 2,4,5. This could be due to low number assessed.

Year 3: School Year 2015

Semester Assessed	Course Assessed	CLO – GE/ILO Alignment	Results of Assessments
Spring 2015	SC209	CLO 1-6- GE/ILO 1,3	70% of students performed at proficiency level for all CLO's except CLO 2; therefore more time is needed to review CLO 2 and assessment, and revise as needed.

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4.0 General Education Program Learning Outcomes (GE/PLOs) Assessment

List PLOs	Proficiency Levels	Results of Assessments

5.0 Evaluation of Previous Program Review Action Plans

Indicate the status of the previous program review action plans

Action Plan Activity/Objectives	Status Complete/Ongoing/Incomplete	Remarks
Resource request	Incomplete	Request from last review and no action.

6.0 Current Review Action Plan

Based on this department review results, describe the department 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, GE/ILO)	Needed Resources (if any)	Timeline

7.0 Resource Requests

Type of Resource	Description	Estimated Amount Requested	Justification
Personnel	Full- time	\$16,000/annual	Additional full time faculty is needed to help teach science courses and assist in other department needs.
Facilities	Science Lab A & B: and chemical storage	\$5,000	Ceiling, shelves and cabinets are infested with termites
Equipment	Laboratory stools	\$500.00	More science labs being offered concurrently at full capacity
Supplies			
Software			
Training			
Other			
Total			

Appendix B: All Assessment Evidence (for this review)

Appendix C: Provide Department Learning Outcomes

Appendix D: Provide department mapping that shows alignment of CLOs – GE/ ILOs

Appendix E: Provide signature assignment form

Note: Submit a hard and electronic copy of the Narrative Report with appendix A – E to the Institutional Research Office. Provide a copy to the CPC Chair and keep a copy for your department.