

Q21. Welcome to COA's new, online portal for completing your **Annual Program Update (APU)**. Your work will be saved at the end of each section. If you partially complete a section, *that* section's responses will not be saved. Prior sections will be saved, should you need to stop and leave the portal for a period of time and then come back to it. If you have any questions about the portal during the process, please email Interim Dean Karen Engel at kengel@peralta.edu or call or text her cell phone at (510) 381-5292. For questions about your program or the process, please contact your instructional dean or service area or administrative unit vice president. Thank you!

Q1. Please select the discipline, department or program:

Q102. Please select the Program Type:

- Instructional
- Student Services
- Administrative Services

Q2. Please provide the name of the person(s) completing this Program Review:

Reza Majlesi, Peter Niloufari

Q103. The mission of College of Alameda is to serve the educational needs of its diverse community by providing comprehensive and flexible programs and resources that empower students to achieve their goals.

Q3. Please provide the mission statement for your program:

We strive to provide a learning environment that values diversity, intellectual discussion, critical thinking, and problem solving. We provide students the opportunity to explore the science of life. We are committed to excellence in our teaching, and help students acquire a knowledge of basic facts and theories in biology.

Biology Department offers Associate degree and is committed to teach our students history of scientific discovery in biology, science concepts and how to test biological hypotheses. Students should appreciate the hierarchical nature of biological complexity and the importance of biological knowledge for solving societal problems through critical thinking. The courses in our department empower students to enhance their intellectual competence to achieve personal and professional goals.

Q104. Please specify the **date** of your program's last Comprehensive Program Review (month and year):

10/16/16

Q105. Cut and paste the program goals and administrative unit outcomes (AUOs) from your program's most recent Program Review or AUO documents into the left-hand column. Then complete the remaining columns of the table below. Program Review Archives, PCCD and COA Strategic Goals can be found on [your program's APU home](#) page.

		Progress on goal or AUO attainment (specify: the date completed, revised, or ongoing)	Explanation or Comments (describe any revisions or impediments)
PCCD goal advanced upon completion (#)	COA goal advanced upon completion (#)		

Assessment

Instructors are to review their lecture material to emphasize on the items in Students' Learning Outcome

III. E4	3		
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Curriculum (if applicable)

Expand the number of courses offered. This will allow our department to increase the number of students.

III. E1	5		
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Instruction (if applicable)

Student are expected to write a summary of a research paper published online to broaden their understanding of a subject discussed in the classroom.

III. E4	3		
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Student Services and Student Equity

N/A

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Professional Development, Institutional and Professional Engagement, and Partnerships

Faculty and staff participate in our college professional development workshops that are held in each semester. Those workshops may include cultural sensitivity, instructional techniques, etc.

III. E4	3		
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Other Program Improvement Objectives or AU Outcomes

We are hopeful to start a Microbiology course at 860 Atlantic Ave. We are also exploring other possible courses like Endocrinology, Hematology, Pathophysiology and one semester Anatomy and Physiology combined as well as Marine Biology.

III. E4	3		
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Other Program Improvement Objectives or AU Outcomes

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Q106. Please review and reflect upon the data for your program (see [Data Dashboards](#) on the left of the COA Program Review home page). Then describe any significant changes in the following items and discuss what the changes mean to your program. Focus on the most recent year and/or the years since your last comprehensive program review.

Q107. Using the [Enrollment Data Dashboard](#), review any changes in the student demographics of your students. Particularly consider changing number (or percentage) of student by age, gender, ethnicity, and special populations (foster youth, veterans, low income, students with disabilities). Comment on any changes.

From Spring 2016 thru Spring 2017 the demographic of our minority students either stayed the same or improved. For instance for African-American students the "Total of Record" and "Enrollment count by time of day" increased from 12 to 16. During the same period of time, the result for Hispanic/Latino students stayed the same, 15.
During the same period of time, the number of female students increased from 36 to 47 and for male students the number improved from 23 to 45.
For every age group the enrollment improved as well.
The statistics for foster youth increased from 60 to 93.

Q108. Using the [Enrollment Data Dashboard](#), review and comment about any changes in enrollment by course.

For the period of Spring 2016 thru 2017:
The enrollment for Bio 10 (Introduction to Biology) increased from 60 to 93
The enrollment for General Bio stayed almost the same, 11 to 10
The enrollment for Bio 2 (Anatomy) decreased from 125 to 105
The enrollment for Bio 4 (Physiology) stayed almost the same, 34 to 32

Q109. Using the [Productivity Data Dashboard](#), review and comment on any changes in the productivity of your program and courses.

The productivity from Spring 2016 thru Spring 2017 decreased from 14.7 to 13.7

Q110. For Student Services units, consider and comment on any changes in the number of student contacts and the success rates of the students served.

Q111. Using the [Course Completion](#) and [Retention Data Dashboards](#), review and comment on any changes in the completion and retention rates of your program's courses.

During the period of Spring 2016 to Spring 2017, the Course Completion improved from 68 to 72%
During the same period of time the Retention Rate decreased from 77% to 75%

Q112. Using the [Course Completion](#) and [Retention Data Dashboards](#), review and comment on any changes in the completion and retention rates of your program's **Distance Education or Hybrid** classes versus **face-to-face** (or lecture) classes. Use the DE filter. Set it to "NULL" to review only face-to-face classes.

During the period of Spring 2016 to Spring 2017, the Course Completion improved from 66 to 70%
During the same period of time the Retention Rate decreased from 77% to 78%

Q113. Review and reflect on other program specific data or unplanned events that reflect significant changes in the program.

No significant changes has been observed.

Q114. Using the [Equity Data Dashboards](#), please review the student success data for your program and comment upon it. Do

performance gaps exist in the student success or achievement rates for disproportionately impacted students, including African-American, Hispanic/Latino, Filipinos/Pacific Islanders, foster youth, veterans, students with disabilities or other groups not listed here?

Yes

No

Q115. If differences exist, please detail the differences and describe the activities your program is making to address the differences. How will your program evaluate the effectiveness of these activities?

The course completion for all students in Biology department during the period of Spring 2016 thru Spring 2017 was 66%. For African-American the rate is 46%, for Asian is 76%, for Hispanic is 57% and for White people is 74%. We opened a tutoring program for those students who are in need of more attention. We also has MESA to help high school students early on before they fall behind.

Q116. What curricular, pedagogical or other changes has your department made since the most recent program review?

We have been reviewing our curriculum regularly. We are in the process of changing our Bio 10 Course Outline to reflect recent changes in pedagogical approaches for the main population who take this course. These students are usually taking Biology for the first time and we realized the need for a different approach to make sure they complete the course.

Q117. Were these changes based on assessment of student learning outcomes at the course or program level?

Yes

No

Q118. Please identify the assessment used.

We assessed the completion rate of the course and the age of the students who take this course.

Q119. Please describe the basis for the change if assessment was not used (choose all that apply).

This question must always be answered.

Q120. Attach a summary depicting the program's progress on assessment of course and program level outcomes (SLOs and PLOs).

[Biology department task.pdf](#)

482.6KB

application/pdf

Q121. Please evaluate your program's progress on assessment. What are the plans for further assessments in the upcoming academic year? Please include a timeline and/or assessment plan for the future.

Our assessment shows that we met and/or exceed the Biology program goal. We are going to work on the rest of our goal in this calendar year.

Q124. What does your program do to ensure that meaningful dialogue takes place in both shaping and assessing course and program level outcomes? Where can one find the evidence of the dialogue?

We have regular meeting in our Biology department, twice a semester. We have minute for each meeting and regularly

Q123. Describe your plans for improvement projects based upon the assessment results.

We have met the assessed criteria and we are going to continue to evaluate your progress with other goals which were set up by the department

Q125. Attach evidence of these assessment results (the assessment report from [Taskstream](#), departmental meeting notes, or the assessment spreadsheet showing these results).

[Assessment finding.pdf](#)

383.7KB

application/pdf

Q126. Is your program one of the below?

- CTE program
- Counseling Department
- Library Services
- Student Services or Administrative Unit
- None of the Above

Q128. For CTE Programs: Please describe any recommendations resulting from advisory committee meetings that have occurred since your last program review.

The question answer displayed to the respondent

Q129. Is your CTE program working with a Deputy Sector Navigator?

The question answer displayed to the respondent

Q130. Briefly describe your CTE programs' work with the Deputy Sector Navigator?

The question answer displayed to the respondent

Q131. Is your CTE program currently participating in any grants? Please discuss your progress in meeting the stated goals in the grant(s).

The question answer displayed to the respondent

Q132. For Counseling: What has the counseling department done to improve course completion and retention rates? What is planned for the future?

The question answer displayed to the respondent

Q134. What is the counseling department planning to do to improve course completion and retention rates in the future?

This question is not displayed to the respondent

Q133. What has the counseling department done to improve SSSP counseling services? Please discuss your progress in improving SSSP counseling services.

This question is not displayed to the respondent

Q135. For Library Services: Please describe any changes in the library services, collections or instructional programs since the last program review or annual program update.

This question is not displayed to the respondent

Q136. Please fill in the information below re Library Services:

This question is not displayed to the respondent

Q137. For Student Services or Administrative Units: Briefly describe the results of any student satisfaction surveys or college surveys that included evaluation and/or input about the effectiveness of the services provided by your unit.

This question is not displayed to the respondent

Q138. How has this information informed unit planning and goal setting?

This question is not displayed to the respondent

Q139. Briefly describe any changes that have impacted the work of your unit.

This question is not displayed to the respondent

Q146. Please find the Prior-Year Resource Utilization Self-Evaluation Template in your [Program Review home page](#), review your expenditures for 2016-17 and complete the form. Upload it here when you are finished.

[Prior-Year-Resource Biology.xlsx](#)

17KB

application/vnd.openxmlformats-officedocument.spreadsheetml.sheet

Q140. Human Resources: If you are requesting new or additional positions, in any job classification, please explain how new positions will contribute to increased student success:

Already requested in recent program review?	Program goal (cut and paste from program review)	Connected to assessment results and plans?	Contribution to student success	Alignment with college goal (#)	Alignment with PCCD goal (letter)
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Request 1:

Biology Instructor. Since our Biology instructor retired, we have been using part time instructors to teach major Biology courses, which created instability and as a result our enrollment declined.

Yes

Students understand and discuss different life forms based on their general knowledge of biological diversity and taxonomic

yes

yes

3

C

Request 2:

Biology Instructor. We are trying to expand our department and include new courses that brings more students to the college. without having Microbiology, Ecology and Oceanography instructor, we cannot create a stable program.

Yes

Students apply an understanding of the scientific method to critical analyses of scientific and nonscientific explanations and hypotheses

yes

yes

3

C

Other:

Part time lab technician. By adding more sections to our program, our lab technician needs more support to make sure our new programs runs smoothly.

yes

Students understand and discuss different life forms based on their general knowledge of biological diversity and taxonomic

yes

yes

3

C

	Already requested in recent program review?	Program goal (cut and paste from program review)	Connected to assessment results and plans?	Contribution to student success	Alignment with college goal (#)	Alignment with PCCD goal (letter)
<p>Request 1:</p> <p>High speed internet and wireless, Smart classroom, computer lab. We have had many issues with the internet at 860 Atlantic Ave. Also because we have online and hybrid courses, we must have a computer lab with at least 27 computers so our students can use it for their work and/or exams. We have been moving back and forth between the main campus and 860 Atlantic Ave for all these years.</p>	yes	Students understand and discuss different life forms based on their general knowledge of biological diversity and taxonomic	yes	yes	3	C
<p>Request 2:</p> <p>Works, EKGs machines, Spirometers, Microscopes, models. We are in need of newer equipments. Our microscopes are so old that students struggle to find what is needed to be seen. That causes frustration and tension.</p>	yes	Students apply an understanding of the scientific method to critical analyses of scientific and nonscientific explanations and hypotheses	yes	yes	3	C

Other:

Laptops. We are teaching many sections online and hybrid. Our instructors are required to record their lectures online. The laptops that school has provided does not support the software for recording due to lack of strong processors etc.

No

Students understand and discuss different life forms based on their general knowledge of biological diversity and taxonomic

yes

yes

3

C

Q142. **Facilities:** How will this facilities request contribute to student success? Indicate whether and how facilities maintenance and repair affected your program in the past year with your request.

	Already requested in recent program review?	Program goal (cut and paste from program review)	Connected to assessment results and plans?	Contribution to student success	Alignment with college goal (#)	Alignment with PCCD goal (letter)
<p>Request 1:</p> <p>Bigger lab area. By adding more classes we need to ensure that our facility support our new programs. For instance we need to have a designated lab for microbiology.</p>	yes	Students understand and discuss different life forms based on their general knowledge of biological diversity and taxonomic	yes	yes	3	C
<p>Request 2:</p> <div style="border: 1px solid black; height: 60px; width: 100%;"></div>						

Other:

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Q145. Professional Development or Other Requests: How will the professional development (PD) activity contribute to student success? What PD opportunities and contributions will your program make to the college in the future?

	Already requested in recent program review?	Program goal (cut and paste from program review)	Connected to assessment results and plans?	Contribution to student success	Alignment with college goal (#)	Alignment with PCCD goal (letter)
<p>Request 1:</p> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> Training on how to use new equipments is essential. For instance how to use new version of iWorks for our Physiology instructors. </div>	<div style="border: 1px solid black; padding: 2px 10px;">Yes</div>	Students understand and discuss different life forms based on their general knowledge of biological diversity and taxonomic	<div style="border: 1px solid black; padding: 2px 10px;">yes</div>	<div style="border: 1px solid black; padding: 2px 10px;">yes</div>	<div style="border: 1px solid black; padding: 2px 10px;">3</div>	<div style="border: 1px solid black; padding: 2px 10px;">C</div>
<p>Request 2:</p> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> Training on how to teach online using software is essential for our hybrid and online courses. </div>	<div style="border: 1px solid black; padding: 2px 10px;">Yes</div>	Students understand and discuss different life forms based on their general knowledge of biological diversity and taxonomic	<div style="border: 1px solid black; padding: 2px 10px;">yes</div>	<div style="border: 1px solid black; padding: 2px 10px;">yes</div>	<div style="border: 1px solid black; padding: 2px 10px;">3</div>	<div style="border: 1px solid black; padding: 2px 10px;">C</div>

Other:

Equipment repair including: repair Flaskwasher, installation of plumbing infrastructure to support hook-up for flaskwasher, Repair Autoclave, installation of plumbing infrastructure to support hook-up for Autoclave

yes

Students apply an understanding of the scientific method to critical analyses of scientific and nonscientific explanations and hypotheses

yes

yes

3

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Q144. Congratulations. You have completed your Annual Program Update for 2017-18. If you have completed each question in each section, you may close this tab. Your answers will be saved and submitted. Thank you!

Location Data

Location: [\(37.670394897461, -121.93740081787\)](#)

Source: GeoIP Estimation



Biology (BIOL) AS

2016-2017 Assessment Cycle

Assessment Plan

Mission Statement

The mission of the Biology Department is to prepare students for admission to advanced academic and professional programs, and ultimately for careers in life science

Measures

Understanding of scientific method

Outcome

Outcome: Students will apply an understanding of the scientific metho

Students are able to differentiate scientific hypotheses, derived through the scientific method, from explanations generated through nonscientific methods

▼ **Measure:** Scientific method

Program level; Direct - Exam

Details/Description:	In general biology classes, exam questions will address student understanding of the scientific method.
Acceptable Target:	70% of students will be able to list the elements of the scientific method.
Ideal Target:	90% of the students will be able to list the elements of the scientific method.
Implementation Plan (timeline):	Students will be tested this (Spring, 2016) semester.
Key/Responsible Personnel:	Dr. Reza Majlesi

Outcome: Taxonomic relationships

Students are able to explain verbally or in writing, differences between 2 domains and differences between the different subgroups within the prokaryotes eukaryotes.

▼ **Measure:** Taxonomy
Program level; Direct - Exam

Details/Description: Students answer taxonomic questions correctly on exams

Acceptable Target:	60% of students answer questions correctly
Ideal Target:	70% of students answer questions correctly
Implementation Plan (timeline):	Exams are administered during the spring, 2016 semester
Key/Responsible Personnel:	Dr. Reza Majlesi

Outcome: demonstrate skills necessary to operate equipment

Students demonstrate skills necessary to operate equipment used in biological disciplines, such as compound and dissecting microscopes, analytical balances, sphygmomanometers, and spectrosopes.

▼ **Measure:** manual skills
Program level; Direct - Exam

Details/Description: students demonstrate skills necessary to operate equipment used in biological disciplines, such as compound and dissecting microscopes, analytical balances, sphygmomanometers, and spectrosopes.

Acceptable Target: 70% of students use equipment correctly and accurately when tested in laboratory

Ideal Target:	100% of students use equipment correctly and accurately when tested in laboratory
Implementation Plan (timeline):	Students are tested during the Spring, 2016 semester
Key/Responsible Personnel:	Dr. Reza Majlesi

PROGRAM REVISION

No text specified

STATUS REPORT

No text specified

Last Modified: 10/16/2017 06:50:48 PM PDT

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Prior Year Resource Utilization Self-Evaluation Form

Directions: Please review your 2016-17 resource allocations and expenditures provided in the **Expenses 2016-17** tab below. Enter them below and evaluate your use of these funds by completing the table below. Please keep your responses to less than 100 words. If there is additional information, please email it to Interim Dean Engel kengel@pera.edu

College: COA					
Line, Department or Program:					
Contact Person:					
Date:					

Funding Source	2016-17 Funding Allocated	2016-17 Funding Expended	Net Expended	Please describe the impact of these expenditures on your <u>Program Goals</u>	If you have quantitative evidence of the impact of these expenditures, please provide it here	Please describe the impact of these funds on your <u>students'</u> <u>outcomes</u>
General Fund	\$25,564	\$25,564	\$ -			
Instructional Equipment	\$10,000	\$6,488	\$ 3,512			
Instructional Supplies	\$15,800	\$14,802	\$ 998			
Fund 10	\$2,239	\$2,239	\$ -			
Measure A			\$ -			
Strong Workforce			\$ -			
Perkins			\$ -			
Equity	\$3,490	\$3,490	\$ -			
Basic Skills			\$0			
Work-Study			0			
Other			0			

TOTAL	\$57,093	\$52,583	\$4,510			

of those funds by Ita.edu. Thank you.		
If you were not able to utilize all of your resources last year, please explain	With which of the College's 10 college goals do these expenditures best align? (See tab below)	
	3	
	3	
	3	
	3	
	3	

Assessment Findings

Finding per Measure

Understanding of scientific method

Outcome

Outcome: Students will apply an understanding of the scientific metho

Students are able to differentiate scientific hypotheses, derived through the scientific method, from explanations generated through nonscientific methods

▼ **Measure:** Scientific method

Program level; Direct - Exam

Details/Description:	In general biology classes, exam questions will address student understanding of the scientific method.
Acceptable Target:	70% of students will be able to list the elements of the scientific method.
Ideal Target:	90% of the students will be able to list the elements of the scientific method.
Implementation Plan (timeline):	Students will be tested this (Spring, 2016) semester.
Key/Responsible Personnel:	Dr. Reza Majlesi

Findings for Scientific method

No Findings Added

Outcome: Taxonomic relationships

Students are able to explain verbally or in writing, differences between 2 domains and differences between the different subgroups within the prokaryotes eukaryotes.

▼ **Measure:** Taxonomy
Program level; Direct - Exam

Details/Description:	Students answer taxonomic questions correctly on exams
Acceptable Target:	60% of students answer questions correctly
Ideal Target:	70% of students answer questions correctly
Implementation Plan (timeline):	Exams are administered during the spring, 2016 semester
Key/Responsible Personnel:	Dr. Reza Majlesi

Findings for Taxonomy

No Findings Added

Outcome: demonstrate skills necessary to operate equipment

Students demonstrate skills necessary to operate equipment used in biological disciplines, such as compound and dissecting microscopes, analytical balances, sphygmomanometers, and spectrosopes.

▼ **Measure:** manual skills
Program level; Direct - Exam

Details/Description:	students demonstrate skills necessary to operate equipment used in biological disciplines, such as compound and dissecting microscopes, analytical balances, sphygmomanometers, and spectrosopes.
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Acceptable Target:	70% of students use equipment correctly and accurately when tested in laboratory
Ideal Target:	100% of students use equipment correctly and accurately when tested in laboratory
Implementation Plan (timeline):	Students are tested during the Spring, 2016 semester
Key/Responsible Personnel:	Dr. Reza Majlesi

Findings for manual skills

Summary of Findings:	Close to 79% of the students use lab equipments properly during lab hours.
Results:	Acceptable Target Achievement: Exceeded; Ideal Target Achievement : Exceeded
Recommendations :	
Reflections/Notes :	

Overall Recommendations

No text specified

Overall Reflection

No text specified

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