# **College of Alameda**

## Annual Program Update

### Supplemental/Revised Template 2014-2015

Ι.	Overview					
	BI Download:	September 19, 2014	Dept. Chair:	Drs. Patti Tsai & Eileen Clifford		
	Subject/Discipline:	Physics	Dean:	Dr. Charlene Perlas		
	Campus:	College of Alameda				
	Mission Statement	To integrate conceptual understanding, problem-solving, and laboratory exercises in the physics curriculum.				

II. Enrollment – see department specific data sheet

III. Student Success- see department specific data sheet

1	V.	Faculty –								
	SUB	SECT		CENSUS	FTES TOTL	FTEF CONT	FTEF EXSV		FTEF TEMP	FTEF TOTL
	FA13		3	111	22.8	1.12		0	0	1.12
	SP14		3	117	23.5	0.69		0	0.43	1.12

V.	Qualitative Assessments		
	<b>CTE and Vocational</b> : Community and labor market relevance. Present evidence of community need based on Advisory Committee input, industry need data, McIntyre Environmental Scan, McKinsey Economic Report, licensure and job placement rates, etc.		
	<b>Transfer and Basic Skills:</b> Describe how your course offerings address transfer, basic skills, and program completion.	☑ No change – Refer to 2012 Program Review	

VI.	Course SLOs and Assessment		
		Fall 2014	
	Number of active courses in your discipline	4	
	Number with SLOs	4	
	% SLOs/Active Courses	100%	
	Number of courses with SLOs that have been assessed	3 to be completed Fall 2014 4 <sup>th</sup> to be completed Spring 2015	
	% Assessed/SLOs	75% to be completed Fall 2014 100% to be completed Spring 2015	
Describe types of assessment methods you are using Examination of written student assignments and performance on exams.			
	<ul> <li>Describe results of your SLO assessment progress</li> <li>The full-time physics faculty member has given priority to entering SLOs assessed by adjunct faculty, in order for them to be paid for their work. She plans to catch up with her own assessments prior to the accreditation visit in Spring 2015.</li> <li>Describe how assessment results and reflection on those results have led to improvements. By and larger, assessments are successful, reflecting solid integration of concepts and laboratory work with analytical problem-solving.</li> </ul>		

II. Program Learning Outcomes and Assessment			
	Fall 2014		
Number of degrees and certificates in your discipline	N/A		
Number with Program Learning Outcomes	N/A		
Number assessed	N/A		
% Assessed	N/A		
Describe assessment methods you are using N/A			
Describe results of assessment. Describe how assessment of program-level student learning outcomes certificate/degree program improvements. N/A			

VIII. Strategic Planning Goals			
Check all that apply.	Describe how goals apply to your program.		
<ul> <li>Advance Student Access, Success &amp; Equity</li> <li>Engage our Communities &amp; Partners</li> <li>Build Programs of Distinction</li> <li>Create a Culture of Innovation &amp; Collaboration</li> <li>Develop Resources to Advance &amp; Sustain Mission</li> </ul>	Please see Section X.		

IX.	College Strategic Plan Relevance
	Check all that apply
	New program under development
	☑Program that is integral to your college's overall strategy
	☑Program that is essential for transfer
	Program that serves a community niche
	Programs where student enrollment or success has been demonstrably affected by extraordinary external factors, such as barriers due to housing, employment, childcare etc.
	Other

#### X. Action Plan

Please describe your plan for responding to the above data (quantitative, qualitative, and data specifically from course and program learning outcomes assessment). Consider curriculum, pedagogy/instructional, scheduling, and marketing strategies. Also, please reference any cross district collaboration with the same discipline at other Peralta colleges.

Include overall plans/goals and specific action steps.

- 1. The physics faculty member regularly consults with COA Math, Laney Math, and Laney Physics regarding scheduling. College of Alameda has more limited public transportation and a more limited curriculum in math and engineering, so this is crucial to the health of our program. If the district provided a more transparent way for departments to collaborate in scheduling, this job would be much easier.
- 2. The departure of an outstanding geography intern, who left a job in the private sector after teaching through Faculty Diversity Internship Program in Spring 2014, renewed the resolve of the physics faculty member to mentor new instructors, and particularly to encourage them to pursue teaching at the community college level. She makes an effort to make informal visits to new instructors' classes in physics, astronomy, and geography well in advance of their official evaluations. She serves on the tenure review committees for two second-year candidates in the COA Math Department, and a first-year candidate in the Merritt Physics Department. Finally, she will evaluate the full-time physics instructor at Laney this fall.
- 3. Via a PASS proposal, the physics faculty member is in the process of providing full sets of curricular materials for Physics 4A, 4B, and 4C. These materials integrate concepts, laboratory work, and analytical problem-solving. She is also documenting lab setups.
- 4. The physics faculty member is in the process of mounting a series of research posters by former student interns through their sponsored research projects. As can be expected, the interns represent our community college population in their diversity. Biographical cards and photos will be printed to inspire current students to apply for internships.
- 5. Community-related efforts include: Annual event with recruitment officer for internship programs sponsored by the Department of Energy, and former interns; and
- 6. Holding a "Transfer Celebration" and pizza party in the spring, where former students meet students who will be transferring.
- 7. The full-time physics instructor is in the process of organizing the stockroom, following the move to 860 Atlantic in August 2013.

XI.	Needs				
	Please describe and prioritize any faculty, classified, and student assistant needs.				
	1. The physics and chemistry faculty jointly request a position for a new half-time physics/evening chemistry staff assistant, or technician. The primary responsibility would be to prepare and trouble-shoot laboratory experiments for physics and evening chemistry courses. This would include: Reading, comprehending, and implementing scientific procedures from written sources, including equipment manuals, laboratory manuals, and reference books; and evaluating equipment to assess its operational state and making simple repairs. Additional responsibilities would include organizing and maintaining the physics stockroom; and preparing and maintaining kits for classroom demonstrations in chemistry. We would like to recruit individuals with demonstrated initiative and ability to work independently in physics and chemistry laboratory settings; familiarity with mechanical and electrical equipment; familiarity with computer-assisted laboratory instruction; a solid grasp of lower-division chemistry and safety procedures; and strong organizational skills.				
	<ol> <li>Patti Tsai anticipates retiring in Spring 2016. We request a replacement position to interview in Spring 2016, and to start in Fall 2016.</li> </ol>				
	Please describe and prioritize any <b>equipment, material, and supply</b> needs.				

- (1) Function generators, \$5500.
- (2) TurnItIn.com. All physics classes require writing assignments, notably Physics 10 online. TurnItIn, or another plagiarism-detection software, would be very helpful when students submit questionable work.

Please describe and prioritize any facilities needs.

(1.) A photocopy machine with a maintenance contract for the Peralta Science Annex.

(2.) Additional storage space at the Peralta Science Annex.

#### College of Alameda

#### MISSION

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

#### VISION

The Vision of College of Alameda is that we are a diverse, supportive, empowering learning community for seekers of knowledge. We are committed to providing a creative, ethical and inclusive environment in which students develop their abilities as thinkers, workers and citizens of the world.

#### VALUES

We use this vision to choreograph three central themes in our quest for "learning excellence" and services to students.

- \* Academic Excellence
- \* Budgetary Competence
- \* Community Engagement

We call these "our ABCs" emphasizing crucial success indicators for our students in achieving an enhanced capacity to pursue their dreams!

#### District Strategic Goals & Institutional Objectives 2014-2015

The following are the Peralta Community College District's Strategic Goals and Institutional Objectives for the Academic Year 2014-15 (July 1, 2014 – June 30, 2015) which will be evaluated in Summer 2015.

**Strategic Focus for 2014-2015:** Our focus this year will be on student success in the core educational areas of basic skills/ESOL (English for speakers of other languages), transfer, and CTE (career technical education) by encouraging accountability, outcomes assessment, innovation and collaboration while spending within an established budget.

Strategic Goals & 2014-2015 Institutional Objectives	
A: Advance Student Access, Equity, and Success	<ul> <li>A.1 Student Access: Increase enrollment for programs and course offerings in the essential areas of basic skills/ESOL, CTE and transfer to achieve the District target of 19,355 RES FTES.</li> <li>A.2 Student Success: Increase students' participation in SSSP eligible activities by 50%, with specific emphasis on expanding orientations, assessments, academic advising and student educational plans.</li> <li>A.3 Student Success: Using baseline data, increase student engagement in activities, Student leadership development, service learning programs, learning communities, student employment, etc.</li> <li>A.4 Student Equity Planning: Address the achievement gap through fully developing and implementing the student success and equity plans at each campus.</li> </ul>
B: Engage and Leverage Partners	<ul> <li>B.1 Partnerships: Develop a District-wide database that represents our current strategic partnerships and relationships.</li> <li>B.2. Partnerships: Expand partnerships with K-12 institutions, community based organizations, four-year institutions, local government, and regional industries and businesses.</li> </ul>
C: Build Programs of Distinction	<ul> <li>C.1 Student Success: Develop a District-wide first year experience/student success program.</li> <li>C.2 Student Success: Develop an innovative student success program at each college.</li> </ul>
D: Strengthen Accountability, Innovation and Collaboration	<ul> <li>D.1 Service Leadership: Provide professional development opportunities for faculty, staff and administrators that lead to better service to our students and colleagues.</li> <li>D.2 Institutional Leadership and Governance: Evaluate and update policies and administrative procedures and the PBIM participatory governance structure.</li> </ul>