

College of Alameda

Annual Program Update

Supplemental/Revised Template 2014-2015

I. Overview

BI Download:	September 19, 2014	Dept. Chair:	Dr. Eileen Clifford & Dr. Patti Tsai
Subject/Discipline:	Chemistry	Dean:	Dr. Charlene Perlas
Campus:	College of Alameda		
Mission Statement	To teach students a thorough understanding of chemistry and instill a love of science.		

II. Enrollment – *see department specific data sheet*

III. Student Success– *see department specific data sheet*

IV. Faculty –

SUB	SECT	CENSUS	FTES TOTL	FTEF CONT	FTEF EXSV	FTEF TEMP	FTEF TOTL
FA13	6	192	46.68	0.4	0	2.52	2.92
SP14	5	186	49.4	1	0.08	1.48	2.56

V. Qualitative Assessments

CTE and Vocational: 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.

Transfer and Basic Skills: Describe how your course offerings address transfer, basic skills, and program completion.

All courses offered in Chemistry are transferrable to CSU or UC schools. Students interested in nursing, physical therapy, medicine, nutrition, and many other majors all need basic coursework in Chemistry.

VI. Course SLOs and Assessment

	Fall 2014
Number of active courses in your discipline	5 separate courses, 6 classes
Number with SLOs	5
% SLOs/Active Courses	100%
Number of courses with SLOs that have been assessed	Will complete all in Fall 2014
% Assessed/SLOs	100% to be assessed in Fall 2014

Describe types of assessment methods you are using

Examination of written student assignments and performance on exams.

Describe results of your SLO assessment progress

Chem1A and Chem1B use national exams from the American Chemical Society as part of assessment to compare students to national population. Results show that students perform similarly to national averages of all students who take first year college chemistry, whether at two or four year schools, or better.

Describe how assessment results and reflection on those results have led to improvements.

Assessments have shown that students are appropriately challenged, and are learning appropriate depth and amount of material. Chemistry can be very challenging for some students to master, and assessments help to underline what topics need additional revision.

VII. 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 led to certificate/degree program improvements. N/A	

VIII. Strategic Planning Goals

<p>Check all that apply.</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Advance Student Access, Success & Equity <input checked="" type="checkbox"/> Engage our Communities & Partners <input checked="" type="checkbox"/> Build Programs of Distinction <input checked="" type="checkbox"/> Create a Culture of Innovation & Collaboration <input checked="" type="checkbox"/> Develop Resources to Advance & Sustain Mission 	<p>Describe how goals apply to your program.</p> <p style="text-align: center;">Please see action plan below.</p>
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IX. College Strategic Plan Relevance

<p>Check all that apply</p> <ul style="list-style-type: none"> <input type="checkbox"/> New program under development <input checked="" type="checkbox"/> Program that is integral to your college's overall strategy <input checked="" type="checkbox"/> Program that is essential for transfer <input type="checkbox"/> Program that serves a community niche <input type="checkbox"/> Programs where student enrollment or success has been demonstrably affected by extraordinary external factors, such as barriers due to housing, employment, childcare etc. <input type="checkbox"/> Other
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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.

Program learning assessments have been positive, showing that the majority of students are achieving the required mastery of the material. Use of online homework by many instructors has allowed students instant and interactive feedback and has allowed instructors to see the problems that groups of students are having trouble with, and address them quickly in class.

Scheduling additional sections of Chem30A has increased enrollment, and allowed more students to take required courses. Data shows that Chem50 enrollment increases dramatically when it is offered as a late start class. This allows students who are having trouble in Chem1A to realize this and move to Chem50 after the first 2 week drop date. Chem50 will again be offered as a late start class in Spring 2015, and going forward. Students who complete Chem50 are then much better prepared to retake Chem1A. Scheduling is done in accordance with the block scheduling at College of Alameda, with consideration for classes offered at the other Peralta colleges. Additional future classes may run into issues with lab availability.

Chemistry lab sizes are reduced to 25 students in accordance with safety recommendations by the American Chemical Society. An additional section of Chem1A has been added for Spring 2015 to accommodate students who desire to take the class. Smaller class sizes should increase lab safety and allow more instructor/student interaction.

To better serve new chemistry instructors, and to update and clarify lab manual instructions, we propose a project to improve experimental procedures. A binder with photos of lab setup and required materials with user notes on any difficulties in procedures, coupled with improved student instructions should make the lab experience easier and more beneficial for students and for instructors and lab personnel.

XI. Needs

Please describe and prioritize any **faculty, classified, and student assistant** needs.

- 1.) Since there are three chemistry lab sections that meet in the evening from 6-9 PM (T/W and a Thursday section is added for Spring 2015), we request a half-time evening chemistry/physics lab technician to be shared with Physics. The primary responsibility would be to prepare and trouble-shoot laboratory experiments for physics and evening chemistry classes. This would include: Reading, comprehending, and implementing scientific procedures from written sources, including experiment 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 chemistry and physics 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.
- 2.) Continued demand for Chemistry is seen from students every semester. Another full time faculty member is requested for Chemistry to add to the department capabilities, and provide additional full time presence to be daily accessible to students and staff, as well as providing continuity and the ability to invest additional time with the program and help plan its future.
- 3.) Student assistants are currently serving as TA's for both Chem1A and Chem30A classes. They help students in lab with the experimental procedure and concepts. The students are also more willing to ask questions of the TA's and both benefit. We request funding for student TA's to continue as we find qualified students.
- 4.) Funding for adjunct instructors to work on improved lab manuals and protocols.

Please describe and prioritize any **equipment, material, and supply** needs.

- 1.) A classroom demo desk with natural gas, plumbed sink, and electricity for the chemistry lecture hall, room 110. Classroom demos for chemistry are chances to reinforce explanations with safe and dramatic chemical reactions. The lecture hall in D building had a demo desk, as do most chemistry classrooms.
- 2.) Mail service to 860 Atlantic for Chemistry, Physics, and Biology faculty and staff is requested.

Please describe and prioritize any **facilities** needs.

- 1.) The lab facility at 860 Atlantic (room 150) was not designed as a student chemistry lab. Repairs to chemistry lab needed where improper (not heat safe) materials were used and are deteriorating.
 - 1 large student work bench was covered with formica rather than laboratory stone, and now has burn holes and missing strips of formica. Plywood is visible and could soak up chemicals, which would be unsafe for students in other labs who are unaware of hazards from previous class.
 - 1 large stainless steel sink is rusting. Should be laboratory stone material like the other sinks, impervious to chemicals.
- 2.) Future plans for Chemistry lab space (in Building D or ??) to include proper student lab space (locked drawers for each student pair, not to be shared among several classes) for both general chemistry classes and for organic lab classes so that College of Alameda can offer Organic Chemistry, and offer a full degree program in Chemistry.
- 3.) A photocopy machine with a maintenance contract for the Peralta Science Annex.
- 4.) Additional storage space for Chemistry stockroom to be resolved.

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.

<p>Strategic Goals & 2014-2015 Institutional Objectives</p>	
<p>A: Advance Student Access, Equity, and Success</p>	<p>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.</p> <p>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.</p> <p>A.3 Student Success: Using baseline data, increase student engagement in activities such as student governance, student life activities, Student leadership development, service learning programs, learning communities, student employment, etc.</p> <p>A.4 Student Equity Planning: Address the achievement gap through fully developing and implementing the student success and equity plans at each campus.</p>
<p>B: Engage and Leverage Partners</p>	<p>B.1 Partnerships: Develop a District-wide database that represents our current strategic partnerships and relationships.</p> <p>B.2. Partnerships: Expand partnerships with K-12 institutions, community based organizations, four-</p>

	year institutions, local government, and regional industries and businesses.
C: Build Programs of Distinction	<p>C.1 Student Success: Develop a District-wide first year experience/student success program.</p> <p>C.2 Student Success: Develop an innovative student success program at each college.</p>
D: Strengthen Accountability, Innovation and Collaboration	<p>D.1 Service Leadership: Provide professional development opportunities for faculty, staff and administrators that lead to better service to our students and colleagues.</p> <p>D.2 Institutional Leadership and Governance: Evaluate and update policies and administrative procedures and the PBIM participatory governance structure.</p>