#### Administrative Response

# Chemistry October, 2015

We thank you for your hard work, dedication, and commitment to your discipline, profession, and students. The Program Review document, presentation and discussion was thorough and thoughtful. This response contains 4 sections: 1) Commendations, 2) Suggestions/observations, 3) Response to recommendations/areas of SAC needs and 4) Closing comments.

#### 1. Commendations

- \*The Program Review Document was thorough, thoughtful, and well organized.
- \*The Program Review discussion provided significant insight into instructional challenges in the teaching of Chemistry.
- \*The Program Review discussion provided useful history of the instructional program at PCC.
- \*Recommendations based on data, professional standards, and assessment results have been incorporated into Program Review.
- \*Ongoing curriculum revision, based on assessment results, is ongoing and apparent.
- \*Online, hybrid, and flipped-classroom models have been developed and delivered with great creativity and success.
- \*Program outcomes are aligned with PCC's Core Outcomes and transfer opportunities.
- \*Research opportunities have been structured into the Chemistry curriculum.
- \*Chemistry faculty have strongly supported community outreach and student recruitment efforts.

### 2. Suggestions and Observations

Assessment: the proliferation of course-level objectives is overwhelming and will need prioritization in order to become more coherent and assessable.

The Chemistry 151 requirement and competency exam have demonstrated value based on assessment data; however, more work needs to be done to coordinate, communicate, and institutionalize these requirements.

#### 3. **Recommendations**

A. What is the SAC planning to do to improve teaching and learning, student success, and degree or certificate completion?

- 1. Continue improvement of assessment for PCC core outcomes with guidance from the Learning Assessment Council, with a focus on creating improved assessment tools that include the ability to download individual data points and detailed comparison reports. *The DOIs support these ongoing efforts to align curriculum with PCC core outcomes and assess student outcome attainment.*
- 2. Create clear course-specific learning objectives for all courses to enable more consistent and meaningful assessment of outcomes. *The DOIs support these ongoing efforts to create consistent and meaningful assessment of outcomes.*
- 3. Continue to track the effect the CH 151 pre-requisite on student success in CH 221. *The DOIs* support these ongoing efforts to track the effectiveness of CH 151.
- 4. Continue to work on Dual Credit offerings with local high schools. The DOIs support the Chemistry SAC's efforts to work on Dual Credit offerings with local high schools. This should involve verifying that High School lab facilities are equipped to offer college-level Chemistry classes based on PCC CCOGs.
- 5. Update Chemistry Advising Guide flow chart and work with Advising to establish effective communication regarding course pre-reqs, majors, and related fields of study. *The DOIs support this work to work collaboratively with Advising*.
- 6. Collect and analyze data on Chemistry Tutoring at all campuses in order to increase our commitment to student access, success and attendance. *The DOIs support the collecting and analyzing data on the effectiveness of chemistry tutoring.*

Additional Support NOT Requiring Financial Resources: The SAC needs:

- 1. Clearly defined best practices for assessment from the LAC. The DOIs support the Chemistry SAC in its ongoing collaborative work with the LAC to define meaningful, authentic assessment.
- 2. College policy to establish and implement requirements for DL courses to address Integrity issues. The DOIs support the work of TSS, Distance Education, and the EAC Academic Integrity Task Force in identifying and implementing best practices to ensure academic integrity in online courses.
- **3.** Simple anonymous access to SAC-wide course evaluation data that includes the individual raw data points and comparison reports. *Please contact Jody Potter in Systems Support regarding this request. She works directly with Course Evaluations and should be able to assist you with the reports you are requesting.*

Approval/support to use alternative course evaluation tools such as SALG. The Student Assessment of their Learning Gains (SALG) instrument focuses exclusively on the degree to which a course has enabled self-reported student learning. The SALG asks students to assess and report on their own learning, and on the degree to which specific aspects of the course have contributed to that learning. While this may indeed be valuable information, SALG serves a different purpose from PCC's approved course evaluation instrument.

The DOIs see no reason why the five overarching SALG questions could not be included, either by individual instructors or as SAC approved questions, in the standard Course Evaluations administered at PCC. If the SAC decides to utilize SALG separately, however, PCC Course Evaluations will still need to be used for assessment purposes.

4. Increased dialogue with HR to develop effective strategies for recruiting a more diverse parttime and full-time teaching pool. HR has developed new equity training for hiring committees, and hiring managers have developed new practices for outreach to diverse candidates, including HBCUs, HSIs, professional organizations and listservs, and other potential recruiting forums. The DOIs support these efforts and will continue to support the training of hiring committees and hiring managers in implementing these best practices.

### **Recommendations requiring funding**

- 1. The Chemistry SAC is urgently requesting the addition of a permanent full-time evening technician at the Sylvania campus as a matter of safety. Staffing decisions and prioritizations are made at the campus-level and are primarily a matter of internal resource allocation; in this case, however, the DOIs understand the urgency of the safety concern. This position request has the highest priority at Sylvania should campus resources become available for reallocation or additional district-level resources become available to fund this position.
- 2. The Chemistry SAC is recommending the implementation of mandatory Campus-specific Safety and Laboratory Training. *The DOIs support this recommendation and ask the division deans on each campus to work with the FDCs and Risk Management to develop and offer this training.*
- 3. To support student retention and success in the CH 221-3 series the Chemistry SAC is requesting:
  - a. Support to institutionalize the CH 151 competency exam by providing the proctored exam at the testing centers. Testing Centers and the placement testing process are potentially undergoing major changes in the coming year, including the discontinued use of COMPASS for placement testing, introduction of new placement processes, increased demand for disability and make-up testing, and new challenge exams, including for credit for prior learning, or CPL. In its recent Program Review, the Testing Centers have asked for guidance in visioning the future of testing at PCC and prioritizing the many demands on their limited capacity. That work is taking place now in multiple sites and at multiple levels, including a Placement Committee researching alternatives to COMPASS, physical renovations and reorganizations taking place at Rock Creek and

Cascade, and the Deans and Associate Deans of Students working with Testing Centers and their stakeholders to establish priorities, best practices, and staffing needs. The Chemistry SAC recommendation to have the Testing Centers provide the proctored exam for Chemistry 151 is acknowledged and understood and will be taken into consideration as part of this larger visioning and prioritization process. In the meantime, while this process is unfolding, each campus will continue to support the administration of this test as best it can, either through Testing Centers or department and division resources. Sylvania Campus Student Development will work with Chemistry faculty to assure comprehensive testing information is posted on Testing website, as well as Chemistry website. Specific plans for testing are as follows for each campus:

- Cascade: faculty in the Chemistry department currently administer the exam.
- Rock Creek: the Testing Center will begin testing in spring term 2016.
- Southeast: the full-time Chemistry instructor administers the exam once per term.
- Sylvania: the Testing Center will begin testing in winter 2016.
- b. Support in the form of release time or monetary support to develop a computerized version of the exam with automatic Banner connections. This would allow for a "Hands-Free" process to streamline the process for PCC students and employments. There may be a relatively simple way to make online testing and score uploading work once the above described visioning process is completed. It may be possible to use D2L to create an online test, depending on the types of questions that are used, but D2L does not export test results into Banner. However, if the scores data can be extracted in a standard format, we might be able to load test scores into Banner. The DOIs will work with the Dean of Enrollment Services and Deans of Student Development to identify appropriate technical expertise to work with a designated Chemistry instructor.

  Compensation, if appropriate, may be in the form of special projects pay rather than course release.
- c. A more visible and accessible exam registration and information website. The DOIs support working with the Web Team to design a more visible and accessible registration and information website.
- d. To support student success in chemistry courses, the Chemistry SAC is requesting:
  - a. More availability of chemistry tutors and increased hours at the Sylvania campus. Tutoring resources and staffing decisions are made at the campus-level and are primarily a matter of internal resource allocation. The Sylvania DOI and Division Dean acknowledge and understand this recommendation.
  - b. Dedicated, trained and chemistry-vetted paid tutors (both students and PT faculty). Tutoring resources and staffing decisions are made at the campus-level and are primarily a matter of internal resource allocation. The DOIs and Division Deans acknowledge and understand this recommendation.

- c. Increased resources (e.g. texts, model kits, computers with chemistry software). Instructional resources decisions are made at the campus-level and are primarily a matter of internal resource allocation. The DOIs and Division Deans acknowledge and understand this recommendation.
- d. A central location on campus where students can easily access the tutors. *Space allocation decisions are made at the campus-level and are primarily a matter of internal resource allocation. The DOIs and Division Deans acknowledge and understand this recommendation.*
- e. The SAC recommends the creation of two full-time faculty positions: one at Rock Creek and one shared position between Cascade and Southeast. The creation of new faculty positions are made collaboratively at the district-level and are based on a number of factors, including full-time/part-time ratios in a subject-area versus other disciplines, whether enrollment is increasing or declining, whether additional faculty are needed to maintain a program's viability, external accreditation and/or professional standards, and other considerations. The DOIs acknowledge this recommendation.

## 4. Closing Comments

It is apparent that the Chemistry SAC is taking seriously and working hard at strengthening its curriculum.

We want to thank you for such a thoughtful and well-presented Program Review.

Loretta Goldy Craig Kolins Cheryl Scott Kurt Simonds Kendra Cawley

Admin Response December 2015