

FACULTY NEEDS ASSESSMENT APPLICATION
Fall 2016

Name of Person Submitting Request:		Sheri Lillard
Program or Service Area:		Chemistry
Division:		Science
Date of Last Program Efficacy:		Spring 2016
What rating was given?		Continuation
# of FT faculty 6 (+ 1 FT temp)	# of Adjuncts 19	Faculty Load (per semester): 13.92 (EMP); 13.95 SP17
Position Requested:		Full-Time Faculty
Strategic Initiatives Addressed:(See http://www.valleycollege.edu/about-sbvc/office-of-president/college_planning_documents/documents/strategic-plan-report-working-doc-8-25-15-2.pdf)		Access, Student Success

1. Provide a rationale for your request. (Explain, in detail, the need for this position.)

The demand for Chemistry courses at both the introductory level and major's preparation has increased significantly. For Spring 2017, we are covering just 50% of our offerings with full-time faculty. We would be at just 43% without our temporary FT faculty. Making this FT temporary position permanent is necessary to avoid our recent history of relying upon a waiver of the 67% rule and asking Human Resources for permission to allow part-time faculty to teach above the cap. While chemistry has always had a limited pool of adjunct faculty, we have had to scramble the past couple years to hire faculty days before the semester started (or ask for the waiver). The employment opportunities for those meeting minimum qualifications in the discipline are excellent (<http://www.bls.gov/oes/current/oes192031.htm#>) and part-time hourly work cannot compete with the opportunities available in the field. In addition, the restructuring of the allied-health track at SBVC requiring students to complete a prerequisite of Introductory Chemistry before taking the Anatomy & Physiology sequence has strained the resources of the department to accommodate demand. The increased interest in transfer programs in STEM fields has pushed demand for major's preparation, also. The department is simply unable, given current staffing levels, to meet demand for career paths at the associate's and bachelor's degree levels for qualified students.

2. Indicate how the content of the department/program's latest Efficacy Report and/or current EMP supports this request and how the request is tied to program planning. (*Directly reference the relevant information from your latest Efficacy Report and/or current EMP in your discussion.*)

The trends for allied health and STEM (Science, Technology, Engineering and Math) pathways were identified in the last program efficacy (Efficacy, pp. 27-28). We see more students with an interest in pursuing a STEM career and/or allied health pathway. In addition, UC-Riverside's medical school and its spotlight on the lack of medical providers in the Inland Empire has spurred even more interest in the community for STEM preparation. We continue to support major's preparation evening classes (p. 8) for students pursuing STEM pathways while working during the day, and one-day Fri and Sat sections of CHEM 101 for working students. The tremendous growth in general chemistry (150/151 – 9 sections FA16), and

organic chemistry (212/21 – 5 sections FA16) reflects this trend. General chemistry is required for all STEM pathways, and organic chemistry is required for chemistry and biology pathways.

3. Indicate any additional information you want the committee to consider (*for example, course fill rates, regulatory information, compliance, updated efficiency, student success data, planning, etc.*).

To address the drop in efficiency, we have added more sections of major's preparation Chemistry classes last year. The lower cap on these classes reduces efficiency, but improves the number of degrees granted as the general and organic chemistry sequences are required for the Chemistry Associate's Degree.

Chemistry is the central science and the entry level courses for pathways in nearly all Allied Health Career Technical Education (CTE) and transfer programs and all Science, Technology, Engineering and Mathematics (STEM) transfer programs. Restructured Anatomy and Physiology has resulted in Chemistry being the first course to multiple subsequent courses along the allied health pathway. General Chemistry is required preparation for all chemistry, biochemistry, biology, ecology, microbiology, geology, earth sciences, physics, and engineering transfer students. General Chemistry is also required for medical, pharmacy, dental and other allied health professional schools. It is usually the first course at the university level due to prerequisite sequencing of other majors or mathematics prerequisites to begin a sequence. When Chemistry is unable to provide sufficient sections, all areas of science and allied health feel the consequences of too few students in the pipeline. This impacts the efficiency and degree attainment of the institution. We have grown as fast as possible to accommodate demand and support the mission of the college, but we have reached the limit of our adjunct pool. We generated an average faculty load (FTEF) of 13.92 full-time equivalent faculty with five full-time positions (2015-2016 EMP); and are at the same FTEF (13.95) for Spring 2017, with 6 (+1 temporary FT) faculty. We are just barely at 50% of our offerings taught by FT faculty.

The district has asked us to grow our FTES generation; This is not a sustainable activity at our current staffing level. This is a program that can help us achieve the growth required to capture more state funding.

4. What are the consequences of not filling this position?

We will need to cancel more classes due to lack of qualified instructors. Last Fall we had three part-time faculty teaching more than 67%. Only because we were able to hire one FT faculty and have a FT temporary, were we able to avoid this situation. If we lose this FT faculty position, we cannot maintain instructional quality. We will have to scale back our offerings without full-time faculty. This means the institution will have fewer degrees granted in all STEM fields, decreasing the transfer-readiness of our students and providing fewer qualified students to the allied health (nursing) pipeline.