

## FACULTY NEEDS ASSESSMENT APPLICATION

Name of Person Submitting Request:		<b>John Stanskas</b>
Program or Service Area:		<b>Chemistry</b>
Division:		<b>Science</b>
Date of Last Program Efficacy:		<b>2011</b>
What rating was given?		<b>Continuation</b>
# of FT faculty 5	# of Adjuncts 18-20	Faculty Load: 12.44 (FA13) / 13.55 (SP14)
Position Requested:		Full-Time Faculty
Strategic Initiatives Addressed:		Access, Student Success

Replacement  Growth

### 1. Provide a rationale for your request.

The enrollment demand for Chemistry courses at the introductory and major's preparation level have both grown. This semester we had 21 sections of Introductory Chemistry with a waiting list of more than 100 students trying to add, so we added two more sections. We had five sections of General Chemistry I completely filled and turned away 50 students who wanted seats. We could not add a section because we were unable to identify a qualified candidate. For the last two years we have relied upon a waiver of the 67% rule and asked Human Resources for permission to allow a part-time faculty to teach above the cap simply because we were unable to staff classes. While chemistry has always had a limited pool of adjunct, the last two semesters the institution hired part-time faculty and approved a waiver the week before classes began to avoid cancelling full classes.

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 latest Program Efficacy Report and current EMP data support this request How is the request tied to program planning? (*Reference the page number(s) where the information can be found on Program Efficacy.*)

The trends for allied health and STEM (Science, Technology, Engineering and Math) pathways was identified in the last program efficacy (p. 15). Since that report, we have seen more and more students with an interest in pursuing a STEM career and/or allied health pathway. In addition, UC-Riverside's new 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. 6) for students pursuing STEM pathways while working during the day.

3. Provide updated or additional information you wish the committee to consider (*for example: regulatory information, compliance, updated efficiency, student success data, or planning, etc.*).

To address the drop in efficiency, we added more sections of Organic Chemistry last year. The lower cap on these classes reduces efficiency, but improves the number of degrees granted as the Organic sequence is the last set of classes 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. It is usually the first course at the university level due to prerequisites or mathematics prerequisites. 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 will generate an average faculty load (FTEF) of 13 full-time equivalent faculty this academic year with five full-time positions.

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

We may need to cancel classes due to lack of a qualified instructor.