

BUDGET NEEDS ASSESSMENT APPLICATION
Fall 2015

Name of Person Submitting Request:	John Stanskas
Program or Service Area:	Chemistry
Division:	Science
Date of Last Program Efficacy:	2011
What rating was given?	Continuation
Amount Requested:	\$15,000
Strategic Initiatives Addressed: (See Appendix A: http://tinyurl.com/l5oqoxm)	Access, Institutional Effectiveness, Student Success

Note: To facilitate ranking by the committee, please submit separate requests for each general area of budget augmentation needed. Do not request a lump sum to encompass many different areas.

1. Provide a rationale for your request (Please explain clearly the reasons for the need of the budget increase and also state whether this is a new, growth, or restoration request.)

The Chemistry department budget has been effectively cut by at least \$10,000. The department operated with its own budget as well as continuous roll-over money from a lottery fund for a total around \$20,000 for the last few years. Our budget history for instructional supplies is:

2011-2012 \$22,600
 2012-2013 \$20,374
 2013-2014 \$12,825
 2015-2016 \$13,466

In addition, our full-time faculty load has grown to between 14 and 15 FTEF per semester, up from load for 12 three years ago. The added classes have primarily been in major's preparation courses: General Chemistry and Organic Chemistry. These courses have a higher rate of supply usage and the materials are more expensive. We currently offer 51 labs per week, but with the increase in degree-seeking students, we have nearly doubled the number of major's preparation classes that require the most attention for preparation. And, of course, the cost of glassware, chemicals, and transportation of chemicals increases every year with inflation. With more students taking chemistry classes, the amount of breakage in glassware also increases.

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 curricular re-design of the Biology program's Anatomy & Physiology sequence has incorporated a new Chem101 prerequisite to the A&P sequence (Biol250) effective last year. This has increased the pressure for additional Chem101 sections and preparation as Chem101 is now the entry-level to the allied health sequences including Nursing.

In addition we have increased the number of General and Organic Chemistry sections requiring specialized chemicals and increasing cost. The trends for allied health and STEM (Science, Technology, Engineering and Math) pathways were 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. The tremendous growth in general chemistry – 6 full sections this FA14 – reflects this trend. General chemistry is required for all STEM pathways.

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

To improve degree awards, we have increased the number of Organic Chemistry sections also, as correlated to the EMP data. This increase necessitates the use expensive specialized chemicals that do not have a long shelf-life and must be replaced regularly.

4. Evaluate amount requested, as well as related costs (including any ongoing maintenance or updates) and identification of any alternative or ongoing funding sources (*for example, Department, Budget, Perkins, Grants, etc.*).

This request is really a return to prior funding levels that was cobbled together from various transient accounts. As some of those accounts have depleted all funding, it would be useful to have a consistent supply budget that is in line with demand for laboratory needs. Currently, in order to have sufficient supplies in the spring term, we have gone to College Council for an emergency request of funds to buy needed supplies. It is not rational to operate this way and could be more cost effective if we purchased all the supplies we need for the year with a stable budget.

5. What are the consequences of not funding this budget request?

Student learning is directly affected by the laboratory experience. The laboratory experience is a necessary preparation for the well-prepared transfer student. Without an appropriate budget to secure consumable supplies, student learning suffers. It is difficult to train students in scientific thought and reasoning if the laboratory glassware is not available or the chemicals have decomposed and degraded causing unexpected (or no) results.