

**Proposal for Adding a New Faculty Position
For the 2008-09 Academic Year**

Please enter your responses using the text boxes below and email this form to Susan Myers, Faculty Senate President smyers@ohlone.edu by 5:00 pm on April 13, 2007:

Department Making the Proposal:

Chemistry

Author(s) of the Proposal:

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A. Provide a summary description of the position.

Chemistry Instructor

B. Relationship to College-Wide Needs

1. How does the position relate to our college goals?

Our college goals state that we strive to reach diverse populations. The chemistry department is striving to develop programs and course curriculum, which attract and retain the underrepresented student population, which is currently missing from our program. For example, even though the local school districts have 40% Latino/Hispanic population, there is only 5% in our chemistry classes. The instructors are developing the Chem Tech program as well as assisting with the LAB project, which reaches out to underrepresented high school and junior high students.

Goal II is intended to seek improved technologies. In the last year the department has acquired equipment including

3 HPLC

2 NMR

2 GC

Equipment of this sort requires much time outside of class for the purpose of developing curriculum and associated responsibilities. This requires an additional faculty member who has 100% presence on campus. We need someone experienced in analytical instrumentation, otherwise all our donations will be wasted. This is quite literally hundreds of thousands of dollars in GC, HPLC and the like.

2. How will classes offered meet student needs and goals?

Several student populations with divergent needs and goals are addressed:

Health Science/nursing,

Biotechnology

Life long learning.

Future Ohlone students are also served through outreach to underrepresented populations in high school and middle school. Full time faculty are required to orchestrate these programs and projects.

3. How does the position address the needs of the campus or the Newark Center?

The safety of the students is at stake. Students at both campuses suffer ill effects from the large proportion of classes currently taught by part time instructors. Chemistry labs pose serious risk even in the best of circumstances. But this risk is increased when the teacher is inexperienced and unfamiliar with where things are. It is not difficult to imagine the risk this situation creates. For the most part, our adjunct instructors are new to teaching; often they are conducting the experiments for the first time. Unable to attract experienced part timers due to the modest pay scale, Ohlone has very high turnover rate of adjunct chemistry teachers. Too often our part-timers leave as soon as they get some experience. The ratio of part time to full time instructors needs to be greatly reduced.

Because the very few full time teacher are assigned to the transfer track “college level” courses, our health science and biotechnology track chem. courses are taught exclusively by part time instructors at present. Part-time instructors are gone most of the time when not teaching. This means no instructor is available in the areas of instrumentation curriculum and expertise which are at the heart of career oriented courses in chemistry. There is need for increased faculty whose 100% on-campus presence can be devoted to these neglected areas.

4. Does the position address an area of growth?

We foresee growth since we are offering new courses and we will be implementing a Chem Tech program.

C. Relationship to Department Needs

1. Does the position reflect department goals resulting from program review?

Yes, as noted in the program review, the department is suffering from lack of manpower needed to both teach courses but also develop curriculum and oversee instrumentation. There is no full time instructor to teach Chem 101B “General Chemistry”, a critical course since it is the feeder for courses like Organic Chemistry Chem 112A, General Biology Bio 101A, Mechanics Physics 140, to name a few. Therefore Chem 101 students require rigorous preparation. This not an easy course. Its labs are difficult to make and assignments are commonly advanced in nature. In the last two years no part time instructor would teach Chem 101B twice in a row. This excessive turnover leads to spotty and inconsistent quality of instruction. Students are suffering because of this. We urgently need a full time instructor that could teach this course as well as other intro courses like Chem 102, 108, 106A-B and 109, which are not as rigorous, but nonetheless better taught by a full-timer.

2. What is the ratio of full time to part time faculty?

2 Full time faculty / 7 part time faculty

(Formally 3 full time faculty but one is on 100% assignment with no teaching load)

3. What is the current WSCH/FTEF in the department?

(data is being sought)

4. Is this position related to a new program?

The Chemistry department is adding a Chemistry Technology branch, which needs curriculum expansion and development. Furthermore, overall revamping of curriculum is occurring throughout the courses.

D. Any other rationale to support the position proposal:

Dramatically higher numbers of chemistry students are expected. The temporary low number of General Chemistry Chem 101 students will soon be reversed. The high attrition from Chem 101A stems from the inadequate prerequisite course 106A. The chemistry department has addressed this need with improved curriculum and a learning community. For example, the course Chem 102 "Preparation for General Chemistry" has been developed specifically designed to prepare students for success in Chem 101A and B. The resultant student success in Chem 101A is already leading to dramatically higher numbers in all subsequent chemistry courses; 101B, 112A, 112B. Furthermore courses are being developed for Chem Tech such as Quantitative Chemistry. The outreach in behalf of underrepresented populations will further swell the WSCH/FTET ratio.

As numbers grow, the load cap for part-timers will lead to an even higher number of part-timers. The above courses each equal 47% load for only one section, for two lab sections with the same instructor teaching the lecture equal 74% load which a part time instructor is not allowed to teach. It is wasteful and inefficient for each instructor to be assigned only one section. But even worse is to force students to have two different instructors: one for lab and one for lecture. A situation like this is detrimental for students since lab and lecture are closely related specially in higher courses like the mentioned above, the resulting disconnect has been seen to greatly reduce student success, especially among at-risk students.

We claim to put high priority on student success, yet we risk students entering into Organic Chemistry 112-A without the quality of instruction that comes with experienced, fully committed instructors. These students stand the risk of not making it in this course and therefore not being able to transfer.