2014-15 Proposal to Fill a Full-Time Faculty Position

1. Faculty position being proposed
   Chemistry Instructor

2. Proposal Being Made by (List Name(s) and Title(s))
   Dr. Anu Ganguly, Chemistry Professor; Dr. Maru Grant, Chemistry Professor.

3. Summary description of the position
   This is a 100% teaching position with capabilities and expertise in Physical Chemistry, Instrumentation, and Quantitative chemistry. We are looking for a full-time chemistry faculty who will lead the preparatory chemistry classes, will support Chem 101 A and B, and Chem 109 and have expertise in Instrumentation.

4. Rationale for filling this position: include examples of how this position impacts students, program needs, and college goals
   As noted in the program review, the department is suffering from lack of manpower needed to both teach courses and also develop curriculum and oversee instrumentation.
   In the past few years our Chemistry courses such as CHEM 102, CHEM 109 and CHEM 101A and B have exploded to several sections each semester most of which are taught by part-timers. The introductory course CHEM 102, that prepares the students for CHEM 101A, is being taught exclusively by part-timers; this results in a heterogeneous preparation of the students when entering CHEM 101A affecting their success in it.
   Some sections of CHEM 101A and B have to be split and taught also by part time instructors. Students then have one instructor for the lecture and another one for the laboratory. A situation like this is detrimental for students since lab and lecture are closely related specially in higher courses like CHEM 101, the resulting disconnect has been seen to greatly reduce student success, especially among at-risk students.
   The instrumentation courses we offer have no full time expertise either.

5. Are there any externally imposed requirements such as a specialized program accreditation that would put this program in jeopardy if a full time position is not filled? If so, please explain.
   None

6. Any other rationale to support the position proposal:
   Dramatically higher numbers of chemistry students are enrolling in our Chemistry courses. In the last year we have opened more sections, even these are not enough. Students are being turned down to get enrolled in General Chemistry CHEM 101A and B. These courses are prerequisites to several other courses like Organic Chemistry, Biology and Materials Science to name a few. We claim to put high priority on student success, yet we risk students entering into these courses without the quality of instruction that comes with experienced, fully committed instructors. These students stand the risk of not making it in these courses and therefore not being able to transfer.
   As numbers grow, the load cap for part-timers leads 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.
   In the last years 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 equipment will be wasted. This is quite literally hundreds of thousands of dollars in equipment.

Since we have the equipment, it would be desirable to offer the course: Quantitative Chemistry as most of the community colleges in the area do. The need is here but we need a full time faculty that would be in charge of this course.

The remaining questions to be completed by Deans

7. A statement by the Dean of the division housing this position, which includes data, evidence, and analysis.

The Chemistry Department had three FT instructors until SP13, when Yvette Niccolls retired and was not replaced. Ever since her retirement, we have continued to add chemistry sections to the schedule. This has resulted in a poor FT:PT ratio of 29:71, in a department where safety and consistency are essential! Having numerous adjuncts teaching these courses increases the likelihood that not all students are getting the same, quality foundation. The Chemistry Department mentioned this same concern in their part of the proposal and I need to highlight it again. Chemistry courses serve virtually all pathways – transfer, GE, and CTE students all utilize these important courses. We are currently teaching the equivalent of 6.64 FT faculty load. Even if we hired this third position in chemistry, we would still have half the chemistry load taught by adjuncts. It is important that we have another FT faculty member to help with the mentoring of adjuncts and share the oversight of the CHEM-109 and CHEM-102 courses. All of these courses are currently taught by adjuncts. Finally, having a FT member of the chemistry department that is able to provide expertise in instrumentation will help the department grow and support the much of the instrumentation courses that were started in the Chem Tech program, which will now continue as part of our new direction in Quantitative Chemistry.

DATA SUMMARY:

8. What is the department FTES?

128.15

9. What is the ratio of full-time to part-time faculty in the department?

29 (FT) : 71 (PT)

10. What is the ratio of full-time faculty to department FTES?

67

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

618

12. What is the number of sections taught by full-time faculty and number taught by part-time faculty?

5 are taught by FT and 18 are taught by PT

13. Does the position address an area of growth? If yes, include a three year trend line for FTES.

The FTES in FA10 was 117.87 (and that is when we had 3 FT Chemistry faculty) and now it is 128.15, which represents an increase of 8.72% over this three-year period.