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Page 1: Full-Time Faculty Position Form

Q1

Please enter the following:

Department	Chemistry
Position Title	Chemistry Instructor, Tenure-Track

Q2

1. Which program review goal(s) is this request supporting? Please state how the position will help advance the specific goals. (Rubric Criterion 3) (300 words or less)

One of our key goals in chemistry has been designing STEM workshops and other student support interventions to increase the retention and success of our STEM students. Chemistry-specific interventions have primarily targeted students in our introductory chemistry courses since these classes consistently have the lowest student success rates of all our chemistry courses, and can act as a barrier to students continuing on STEM pathways. Our preparatory chemistry course, Chemistry 120 has the lowest success rate, averaging 52% from Fall 2016 to Spring 2021, compared to approximately 70% for chemistry as a whole over the same time frame. Our long-time coordinator of Chemistry 120 retired during the Spring 2020 semester, leaving us without a dedicated coordinator for this class. The other two remaining full-time instructors in the department coordinate our general chemistry series (Chem 141 and Chem 142) and our organic chemistry series (Chem 231 and Chem 232). A dedicated coordinator for each these areas within our discipline (preparatory chemistry, general chemistry and organic chemistry) is crucial for advancing the goals of the department.

Q3

2. Which strategic priority/priorities is this request supporting. Please state how the position will help advance the specific priority/priorities and the College's mission. (Rubric Criterion 4) Acceleration Guided Student Pathways Student Validation and Engagement Organizational Health (300 words or less)

As mentioned above, a key focus of our department over the last several years has been creating and enhancing a network of student support interventions to improve retention and success rates. Our efforts have been bolstered by the award of a \$6 million Title III HSI STEM grant entitled STEM Guided Pathways and Transformational Teaching Practices. A major goal of the grant related work has been to provide significant assistance to disproportionately impacted students and close equity gaps as much as possible. Providing support and opportunities for student engagement on multiple levels creates an ecosystem in which our students can thrive. The design and development of chemistry support activities have been done primarily by the coordinators of our introductory chemistry courses (Chemistry 120 for Science majors and Chemistry 102 for allied-health majors). These coordinators best understand the needs of our incoming students and how to address them. Thus, a full-time faculty member that can also serve as a dedicated coordinator for our preparatory chemistry courses is necessary to advance these strategic priorities and continue to innovate and adapt.

Q4

3. How will this position improve student student learning and achievement, and close equity gaps in access and outcomes in your program. (Rubric Criterion 2) (300 words or less)

Our preparatory chemistry course (Chemistry 120) is the gateway to all of our other chemistry courses required for our science and engineering majors. The majority of students entering into Chem 120 will be required to take at least four additional chemistry classes after Chem 120 if they are a science major. Thus, Chemistry 120 not only serves as an introduction to chemistry topics that will be expanded upon in subsequent courses, but as a place to learn time-management, organizational and study skills necessary for success in future science classes. There is also a significant focus on the development of fundamental laboratory practices and techniques that are a critical foundation for them to build upon moving forward. Students who come into our higher level chemistry classes with underdeveloped skills in any of the aforementioned areas are at a notable disadvantage. The Cuyamaca chemistry department is continually working to improve methods of instruction and increase student engagement, which is of particular importance in our introductory chemistry classes. Our ability to do so will suffer greatly without a dedicated coordinator for these courses. Please see the response to question #2 with regard to closing equity gaps.

Q5

4. Has there been or is there any evidence to demonstrate that there will be an increase in demand for your programs and/or services? How are students being adversely impacted without this position? Please discuss supporting data from recent semesters. For example, enrollment trends, waitlist pressures, or wait time for appointments and support services as they apply to this position. (Rubric Criterion 2)(300 words or less)

Chemistry enrollment has been trending upward over the last several years. We had to a cut some sections during the pandemic due to across the board reductions in each Division, but we expect to revive these as soon as possible. Fill-rates in chemistry classes have averaged 87% from Fall 2016 to Spring 2021 compared to 71% college-wide. Many of our classes consistently experience large waitlists, and thus we are often unable to give seats to all of the students who would like to take our classes in a given semester. We have added new sections when possible to accommodate some of the demand, but we are limited by the amount of lab space that is available.

The Chemistry Department currently has a load cushion of 3.19, and thus we have enough work for an additional three full-time faculty members.

Q6

5. What are the racial and gender demographics of the faculty within the program? What steps will your program take to ensure that the recruitment for this position will encourage/promote faculty diversity? (Rubric Criterion 1)(300 words or less)

Since the retirement of Laurie LeBlanc in March 2020, the full-time faculty in the chemistry department now consists of two white males. The current part-time faculty is 37.5% female and 62.5% male, and consists of White, Hispanic, and Asian-Americans. Chemistry faculty pools at Cuyamaca College tend to be rather small, which can be a challenge when trying to promote and encourage faculty diversity. The chemistry department will work with District HR to ensure extensive outreach for this position with the hopes of diversifying the pool. This doesn't mean that we will simply rely on HR for this task, but that our department will actively seek out opportunities to expand outreach efforts. There are many organizations that exist to promote diversity in chemistry and they generally have a space for job postings. One example is the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE). From their website: "NOBCChE is a non-profit professional organization dedicated to assisting black and other minority students and professionals in fully realizing their potential in academic, professional and entrepreneurial pursuits in chemistry, chemical engineering and allied fields." The job announcement can be posted to their online Career Center. This is just one of many opportunities for outreach that can be utilized if efforts are made to seek them out. The American Chemical Society (ACS) has a host of resources to support the promotion of diversity and inclusion in academia.

Q7

6. Describe why this position is essential to your program and/or service area. How has the lack of this position impacted your program and/or service area? What will be the impact to the program and/or service area if this position is not filled? (Rubric Criterion 1,3)(300 words or less)

The retirement of our most senior faculty member occurred at the same time as the COVID crisis began, compounding the impact of the loss. Our department now has only one tenured, and one tenure-track faculty member, which reduces our full-time faculty by one-third. (The current Full-Time Faculty/Total Faculty ratio is 20%). All of our chemistry courses have significant hands-on laboratory components (3 or 6 hours a week depending on the class) and converting these to online instruction (with only a week or two to plan initially) was a monumental task. While the circumstances brought on by the pandemic are exceptional, moving forward without replacing our retired faculty member will continue to negatively impact our department and students. The loss leaves us without a dedicated coordinator and full-time faculty instructor for Chemistry 120, which will hinder efforts toward improvement and innovation in that course. Moreover, class coordinators are in regular discussion with our chemistry laboratory technicians regarding lab experiment setups, which can often involve troubleshooting and modification on the fly. This process will likely be inconsistent and incomplete for Chem 120 without a full-time faculty member teaching or coordinating the course. Ultimately, the lack of this faculty position will have a negative effect on the student experience.

Q8

7. Is this a new position, replacement for a retirement/upcoming retirement or replacement for internal promotion (faculty to administration), or replacement for other circumstances? (Rubric Criterion 3)(100 words or less)

This is a replacement position for a retirement. Our most senior chemistry faculty member retired in March of 2020. The impact of this retirement is discussed in the response to question #6.

Q9

7. Please confirm that you have discussed this faculty position request with the Division Dean and that you understand that Division Deans will be providing feedback to help inform the prioritization process.

Yes, I have discussed this position request with the Division Dean