

Faculty Request Justification

Complete One Per Department/Program

Date: 05/15/2023

Division: PSME

Department/Program: Chemistry

Number of Faculty Requested: 2

Position	Retirement, Resignation or Growth	Retirement/Resignation Date	Instruction, Non-Instruction, Both	If 'Both', indicate the ratio of instruction to non-instruction
Instructor 1	Growth	N/A	Instruction	N/A
Instructor 2	Growth	N/A	Instruction	N/A

Note: Insert additional rows if needed.

Guiding Principles

De Anza College's [mission](#) and [Educational Master Plan](#) serve as guiding principles for programs to facilitate continuous development, implementation, assessment and evaluation of their program effectiveness as part of ongoing planning efforts.

De Anza identified the following areas within its Educational Master Plan:

- *Outreach, Retention, Student-Centered Instruction and Services, Civic Capacity for Community and Social Change*

Through its [Equity Plan Re-Imagined](#), it identified the following framework to work towards narrowing long-standing equity gaps:

- **Racial Equity:** Faculty members, classified professionals and administrators should: recognize the realities of race and ethnicity for students of color. Develop intersectional understanding of the ways in which institutional racism shapes educational access, opportunity and success for Black, Filipinx, Latinx, Native American, Pacific Islander and other disproportionately affected students.
- **Student Success Factors:** The College should ensure students: Feel connected to the college; Have a goal and know what to do to achieve it; Actively participate in class and extracurricular activities; Stay on track – keeping their eyes on the prize; Feel somebody wants them to succeed and helps them succeed; Have opportunities to contribute on campus and feel their contributions are appreciated.

Based upon these guiding principles, please provide information for each of the following areas:

A. Instructional Faculty

The following data can be gathered from the departmental [program review data sheet](#).

1. Enrollment data for each for each department in which the position is requested. Insert additional rows if needed.

Position	Enrollment (#)			Sections (#)			Fill Rate (%)		
	19-20	20-21	21-22	19-20	20-21	21-22	19-20	20-21	21-22
Instructor 1	3219	3229	2733	119	124	105	95	94	89
Instructor 2	3219	3229	2733	119	124	105	95	94	89

Note: Fill rate is the actual enrollment divided by the maximum enrollment per section.

2. Success and equity data for each department in which the position is requested. Insert additional rows if needed.

Position	Success Rate (%)			Withdraw Rate (%)			Equity Gaps (%)		
	19-20	20-21	21-22	19-20	20-21	21-22	19-20	20-21	21-22
Instructor 1	81	78	77	7	8	10	-13	-10	-11
Instructor 2	81	78	77	7	8	10	-13	-10	-11

Note: Equity gap subtracts the course success rate of the overall population (Asian, White, Native American, Pacific Islander, and Decline to State) from the course success rate of the population areas of focus (African American, Latinx and Filipinx). A negative equity gap indicates that course outcomes for students from the areas of focus are lower than course outcomes for all other student groups.

3. Faculty ratios for each department in which the position is requested. Insert additional rows if needed.

Position	Full Time (FT %)			Part Time (PT %)			Overload (%)		
	19-20	20-21	21-22	19-20	20-21	21-22	19-20	20-21	21-22
Instructor 1	31.2	28.0	33.4	53.7	57.1	48.7	15.1	14.9	17.9
Instructor 2	31.2	28.0	33.4	53.7	57.1	48.7	15.1	14.9	17.9

Note: Overload represents full time faculty teaching overloads as well as all summer assignments.

4. [Awards](#) for each department in which the position is requested. Insert additional rows if needed.

Position	Certificates (#)			Associate Degrees (#)			Assoc. for Transfer (#)		
	19-20	20-21	21-22	19-20	20-21	21-22	19-20	20-21	21-22
Instructor 1	0	0	0	0	0	0	0	0	0
Instructor 2	0	0	0	0	0	0	0	0	0

5. How does the department use the data listed above to develop, adapt, and improve teaching and learning to respond to the needs of changing environments, populations served, and evolving institutional and state priorities?

The department regularly evaluates enrollment and success data in seeking to ensure that our departmental offerings meet the needs of the student populations that we serve. This has led among other things to a meaningful section count expansion for our introductory allied health survey course in recent years as demand for that course exceeded our previous offerings. Recent data has been challenging to interpret with confidence, given swings in enrollment due to large external effects including returning to campus when there were still colleges in the area offering fully only lab courses, and cancellation of the evening program for two quarters before we were able to obtain stockroom support for evening labs. As the residual effects of these changes fade, we hope to be able to establish a new baseline for demand and success rates to help inform the direction of our department going forward.

6. Other information, if any?

B. Non-Instructional Faculty

1. Describe the data used to develop, adapt, and improve teaching, learning, and/or support to enable this position to respond to the needs of changing environments, populations served, and evolving institutional and state priorities (this may include a description of the population served, student needs and experiences from surveys or focus groups, or ratios related to the number of students served relative to current occupational standards).
2. How does the program use these data to develop, adapt, and improve teaching, learning, and/or support to respond to the needs of changing environments, populations served, and evolving institutional and state priorities?
3. How does the position support on-going college operations and/or student success?

C. Justifications for EACH requested position. Please limit each response below to no more than 300 words.

1. Why is the position needed and how would the position contribute to the health, growth, or vitality of the program?

Courses in the chemistry department have been heavily impacted for many years, with most of our sections waitlisted each term. Our ability to maintain the quality of the courses we provide, and to adequately support our students in finding success in those courses depends directly on having enough full-time faculty support to manage the needs of the growing department.

The department has expanded its course offerings by nearly 50% in the last two decades, however the number of full-time faculty is currently the same as it was in the 1999-2000 academic year. As a consequence, the share of our courses taught by full-time faculty has routinely hovered around 30%, even falling below that mark in 2020-21. This places the department's full-time load percentage drastically below the level prescribed by the American Chemical Society and the State of California (75%), and short of the more modest goal of parity with Foothill College (41-45% over the last 3 years), which currently has more full-time faculty, despite offering fewer courses.

The department desperately needs a growth hire to mitigate our low %FT ratio and ensure that we can reliably staff our courses and to support the current program with respect to curriculum, SLO work, and equity, and to maintain academic excellence within the program. A second growth hire would be a welcome addition, as this would allow the department the collective bandwidth to move beyond simply struggling to support our program in its current state and devote energy to ensuring that our part-time faculty are adequately supported and that our lab program receives overdue updates to increase its relevance and reduce its cost for students.

2. How does this request align with the goals in the [Educational Master Plan](#)?

The Educational Master Plan is fundamentally focused on creating a college where students feel valued, supported and engaged, which increases the likelihood that they will persist through challenges that arise during their educational journeys, and will develop the core competencies that are the center of De Anza's promise to its students and to the larger community. The addition of a new full-time hire will allow our faculty to devote more attention to their students and to take thoughtful steps toward increasing engagement in the classroom, rather than working overtime trying to ensure that classes are staffed (or in some cases taking those classes themselves as unintended overloads to avoid possible cancellation). Further, a full complement of full-time faculty would allow the department as a practical matter to move forward more quickly with planned efforts to reduce barriers to student persistence, specifically in the adoption of low or zero-cost course materials. While we are already moving forward where possible with substitution of OER materials for lecture textbooks in most of our courses, challenges remain with respect to some of our labs, which continue to use costly publisher provided texts. Compared to a simple textbook change, the overhaul of a lab program requires a much more substantial input of faculty time, and while we have found ways to make the shift for some of our logistically simpler courses, making headway on others remains challenging given our current staffing levels. Additional full-time faculty support would ensure that we can move more efficiently toward a fully updated lab curriculum that ensure students are developing competencies that are relevant to modern laboratory work, while simultaneously reducing their cost burden.

3. How does this request align with the College's [Equity Plan Re-Imagined](#)?

The Equity Plan Re-Imagined recognizes that students are more likely to succeed when they are connected in meaningful ways to the college community, and critically, when they "feel that somebody wants them to succeed and helps them to succeed." The importance of a student's perception that their instructor believes in their ability to succeed and is interested in making sure they have all the tools to do so is especially pronounced for courses in which students feel intimidated or anxious about the difficulty of the content, as is often the case in chemistry.

A full-time hire would help the department to distribute the work associated with maintaining and updating our lab programs, freeing up time to pursue additional initiatives aimed at equity that have been discussed in the past (identifying a mechanism and funding source for embedded tutoring, especially in introductory courses, linking of courses between CHEM and MATH to create a cohort effect for commonly co-enrolled sequences, etc.). A second hire would allow us to further work toward a longstanding goal of bolstering the support that we provide to our part-time faculty, both in terms of their initial introduction to the department and campus, and in the form of ongoing support and mentoring. While an adequate complement of full-time faculty is necessary in part simply to ensure that the general business of the department can be managed, it is also incumbent upon the full-time members to be a reliable resource for part-time faculty and help them to feel connected and valued at the college, so that they can mirror those qualities in their interactions with students in the sizable majority of our courses that they teach.

4. Are there any special regulations such as law, Title 5, Education Code, student success initiative or accreditation standards, etc. for the position? Provide documentation.

To the best of our knowledge, there are no such special regulations that apply to these faculty requests.

5. Explain how the work will be accomplished if the position is not filled.

The simple answer is that beyond maintaining the current of our program, it is likely that progress on many of the improvements discussed above will occur slowly without additional faculty support. While we currently have six full-time faculty on paper, it is likely for the foreseeable future that we will have the equivalent of at least one full-time faculty on release from teaching duties due to service for the college in other areas. Some of these updates to the program, in particular any substantial overhauls of lab curricula, may need to be undertaken through professional development leave projects, though of course such projects would effectively reduce our staffing levels even further while they are underway.

6. Other information, if any.