Rubric Comprehensive Program Review 2024

Instructional Discipline Template

A. Program Information

Narrative Criteria

The Program Mission Statement

- clearly states the purpose of the program
- indicates the primary function
- indicates the activities of the program
- describes the programs' aspirational goals for the future and what the program hopes to achieve
- reflects the program's priorities and values
- indicates who the students and/or stakeholders are
- is aligned to the college mission statement
- is clear and concise

~	Meets Expectations
	Needs Improvement

Feedback

These details are all outlined in this section.

B. Enrollment Trends

Data Criteria

• The data shows that the program is making progress towards accomplishing their goals (The data is in alignment with the program's goals).

Narrative Criteria

The narrative response...

- aligns with data
- is informed by data
- is within the control of the program
- has measurable outcomes

Data

✓ Meets Expectations

□ Needs Improvement

Narrative

✓ Meets Expectations

□ Needs Improvement

Feedback

The PR document shows that the department has reflected deeply about their enrollment numbers. The main points here being is that the trends in enrollment in the department are consistent with the rest of the college, the common theme of lab sciences that have double lectures come with no additional pay and can be detrimental to our students' learning experiences, and the ongoing budget changes of having to cut then add have proved difficult in scheduling. Overall, we have seen in the past several years at the college that enrollment is growing, and STEM continues to be a leader in that trend. The chemistry department is no exception to that. We have large wait lists for many classes and have often added later rather than adding ahead of the schedule being made public. This is true for many departments, and the goal of continuing to offer more sections while accurately gauging enrollment trends is a focus to help maintain our productivity. The goal of getting to 425 FTES is realistic, and we may even hit that number this current 24-25 academic year. The evolution of the chemistry department offering more sections in hybrid format has definitely contributed



to this increase, as it gives students more flexibility in their schedule to maintain a work-life balance, and also being able to enroll in other sections of courses that may have conflicted with an otherwise non-hybrid format. The demands from students does come with some challenges, such as lab space availability and staff availability. We recently lost one full-timer who resigned just shortly before receiving tenure, but we were able to make that back up by getting a new full-timer who already had tenure from De Anza. However, with two full-timers having currently been on article 19 for several years, eventually we will lose them and the needs for hiring another full-timer are definitely in sight. We have been offering some dual enrollment sections each year with KLS and Eastside Prep, and there may be some opportunities there for expanding some more sections in that arena.

C. Enrollment by Student Demographics

Data Criteria

• The data shows that the program is making progress towards accomplishing their goals (The data is in alignment with the program's goals).

Narrative Criteria

The narrative response...

- aligns with data
- is informed by data
- is within the control of the program
- has measurable outcomes

Data	
	Meets Expectations
	Needs Improvement
Narrative	
~	Meets Expectations
	Needs Improvement

Feedback

The trends in demographics in chemistry enrollment have been fairly consistent over the past 5 years, and many of the trends detailed in the PR are consistent with college wide trends. The fact that the majority of students taking chemistry courses are female is consistent with the fact that a lot of our chemistry 30A and 25 sections feed into allied health and biology pathways, which are also female dominant. Partnering with Umoja and Puente is a nice idea to increase more Latinx and AA students in our chemistry courses, but that also assumes that Umoja and Puente programs have students that are on pathways where these classes are required beyond just a general studies portion of their ed plans. As for the early level math courses being offered, we currently have MATH 40A - quantitative reasoning and MATH 48A - precalculus I which would be the two courses that mostly align with helping students prep for math skills needed in chemistry. With all of the rules around AB 1705 still evolving, perhaps we can look to offer some non-credit math for chemistry courses to support the students in those skills. We are not legally allowed to offer courses in math that are not transfer level due to AB 705. I agree that tutoring in the STEM Center and embedded tutors are extremely important and beneficial to students' success in our STEM programs.

D. Overall Student Course Success

Click the link below to view the program's Course Success by Modality data

https://foothilldeanza-

<u>my.sharepoint.com/:f:/g/personal/20078222_fhda_edu/Euw5yUwbvn5OiqkDTAn6yIYBycY0PmInLpXnQm47l7cPKQ?</u> e=rSml5L

Data Criteria

• The data shows that the program is making progress towards accomplishing their goals (The data is in alignment with the program's goals).



Narrative Criteria

The narrative response...

- aligns with data
- is informed by data
- is within the control of the program
- has measurable outcomes

Data	
	Meets Expectations
	Needs Improvement
Narrative	
	Meets Expectations
	Needs Improvement

Feedback

The overall success rates of the chemistry students are increasing close to 80% over the past couple of years, up 5% from 21-22, as outlined in the PR. Also as detailed in the PR, this could be due to the fact that we have more hybrid sections being offered now than in the past, and this could allow students more time to balance their schedules and allowing them to succeed at higher rates. Professional development is generally supported at the college, so if their are professional development activities that the department sees as useful, then we should have that conversation. The chemistry departmental faculty are dedicated to continuing with PD efforts in chemistry education and with more hybrid sections being offered, that continued effort around RSI and effective online learning goes a long way to our students' successes.

E. Disproportionate Impact

Click the link below to view the program's Disproportionate Impact data

https://foothilldeanza-

<u>my.sharepoint.com/:f:/g/personal/20078222_fhda_edu/Euw5yUwbvn5OiqkDTAn6yIYBycY0PmInLpXnQm47l7cPKQ?e=rSml5L</u>

Data Criteria

• The data shows that the program is making progress towards accomplishing their goals (The data is in alignment with the program's goals).

Narrative Criteria

The narrative response...

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Data

✓ Meets Expectations

□ Needs Improvement

Narrative

✓ Meets Expectations

□ Needs Improvement

Feedback

The department recognizes the achievement gaps in the data and is reflective upon reasons for why this may be the case, as well as potential ways to improve to lower the gaps. Transitioning to OER textbooks is a good start for students going through the CHEM 1 series. There are chemistry faculty working closely with the MESA program, and the MESA program helps to support students that fall into the disproportionately impacted student populations in our chemistry courses. With this continued partnership, I would expect us to make



progress into lowering the achievement gaps that are detailed in the PR.

One minor suggestion: Reword the answer to "What does the program need to ..." type of questions to be a clear ask rather than a suggestion of what might be useful. E.g. "Seek funds to attend professional development events: ..."

F. Regular and Substantive Interaction

Narrative Criteria

The narrative response...

- aligns with data
- is informed by data
- is within the control of the program
- has measurable outcomes

Narrative

✓ Meets Expectations

□ Needs Improvement

Feedback

Not all courses in the chemistry department are approved for distance ed. However, for the ones that are, we have all of the faculty that teach such sections working through the relevant RSI training at the college. This includes making their communication plans right now and will only continue to improve as time goes on.

G. Summative Evaluation

Overall, the Comprehensive Program Review

Meets Expectations

□ Needs Improvement

Feedback

I acknowledge the theme in the PR that their is an ask to offer more sections in the chemistry department - to be proactive about adding more sections ahead of time rather than waiting to add sections later once demand presents itself outside of the historical trends. However, this is true in every department in STEM right now, and we also need to have a well balanced approach to the ongoing uncertainty of budgetary constraints. The chemistry demand is stable and is growing, and we have added sections practically every quarter over the past year. The main challenges are to find more faculty to teach our classes. The department is clearly dedicated towards student success and shows deep commitment to the care of their program.

FYI: The link provided under H. Rubric seems broken (Access denied)

This form is completed and ready for acceptance.

