Comprehensive Program Review

A. Department Information
Mission

Please enter your department's mission statement here.

The chemistry department guides students in developing the knowledge and skills necessary to succeed in STEM transfer programs and career paths. More broadly, we prepare students to navigate the modern information landscape by nurturing the critical thinking skills necessary to screen that information for quality, credibility and relevance. Our lecture courses focus on building information literacy, quantitative intuition and abstract reasoning skills. Chemistry labs stimulate student curiosity about the natural world while providing the opportunity to (i) apply the scientific method to generate and evaluate data, (ii) communicate scientific results, and (iii) develop the technical skills required to work safely and effectively in a professional laboratory environment. Beyond preparing students for their immediate transfer or career placement goals, the reasoning and communication skills that our students hone through our courses also build their capacity to act as informed and engaged citizens and empower them to act as positive change agents in furthering the vision of a more just, equitable and sustainable society.

How does your program mission statement relate to the mission, vision and values of the college? (https://www.deanza.edu/about-us/mission-and-values.html)?

The department's mission statement is tied into the institutional core competencies spelled out in the De Anza mission statement through its promotion of information literacy, critical thinking, scientific communication, and sustainability as primary aims, but also in its recognition that developing these skills is an integral part of the broader development of students as empowered adults who are able to pursue positive change in their communities.

Program Goals

Enter 1-3 goals for your department to be achieved by spring 2027. Each annual reflection will ask your department to report on progress in meeting your goals. Each goal should be aligned to your department's mission and the college mission. All resource requests and personnel requests should be aligned with your program's mission and goals.

Goal title	Goal description	Responsible parties	Collaboration with	Guided Pathways engagement	What evidence will be used to monitor progress?	How will you assess achievement of the goal?
Increase student supports and reduce costs in introductory courses	Students in our department from disproportionately impacted groups are heavily concentrated in entry-level courses (CHEM 25, CHEM 30A, CHEM 1A), where gaps in readiness result in high rates of attrition. The department aims to identify avenues to provide additional supports for students in these courses (notable expanded tutoring options--both embedded in the classroom and outside, perhaps through the MESA program and in other ways connected with the Village center), to increase the rate at which students succeed in these courses and progress further into our sequences. We also seek to reduce the costs of textbooks and materials (where possible to zero) in these and other courses to remove financial barriers to student success.	Megan Brophy, Chris Deming, David Gray, Brendan Mar, Cinzia Muzzi, Erik Woodbury	De Anza MESA Program		Identification and implementation of tutoring supports in place for students enrolled in CHEM 25, 30AB, and 1A, and adoption of no-cost textbooks and materials.	A measurable improvement in the success rates of disproportionately impacted groups in these courses would be an indication that the realization of this goal is underway, though it is likely to remain an area for development as we continue to iterate on the support framework.
Implementation of AS degrees in chemistry and biochemistry	Our program does not currently offer any degrees, and we have not been able to pursue an ADT in chemistry due to issues with unit restrictions. We aim to explore and implement if possible AS degrees in chemistry and biochemistry as an option in the interim while the ADT option is unavailable to us.	Megan Brophy, Chris Deming, David Gray, Brendan Mar, Cinzia Muzzi, Erik Woodbury			Steps toward implementation of AS degrees in chemistry and biochemistry.	Our department will offer AS degrees in chemistry and biochemistry.
Develop and maintain a modern laboratory program	In order to be successful following transfer to a four-year university, professional program, or technical career, students must develop laboratory skills and familiarity with current equipment, techniques, and hazard management standards. The department aims to review and revise our laboratory curriculum to minimize our environmental impact and increase student awareness of sustainability and safety concerns in chemical labs. We also aim to use current instrumentation and techniques that our students will be able to use in their future endeavors.	Megan Brophy, Chris Deming, David Gray, Brendan Mar, Cinzia Muzzi, Erik Woodbury			Maintenance of current laboratory standards as well as successful adoption of new and contemporary labs.	Our lab courses will utilize modern techniques while minimizing the use of uncessarily toxic chemicals.

Changes Imposed by Internal/External Regulations or Factors

Are there factors unique to your program that may affect your enrollment, success rates or staffing that RAPP should be aware of? (e.g., curriculum changes, program reorganization, noncredit curriculum, loss of personnel, legislative mandates, etc.)

The impacts of AB705 and AB1705 continue to reverberate in our classes, with an increasing number of students arriving without a practical command of the fundamental mathematical concepts that are critical for success in science coursework. This trend likely impacts success rates, as students struggle to layer chemical concepts on top of the mathematical foundations upon which they are built, while simultaneously trying to construct those undergirding foundations at a fast enough pace to keep up with what is being built on top of them.

A recent change at UC Davis has led to our (and other) general chemistry sequences no longer being accepted for students transferring into the Chemistry B. S. Program. This may be an isolated case, but if it becomes a wider trend at our key transfer targets, it may require a consideration of whether to create a calculus-based general chemistry sequence that would articulate universally.

Our course offerings (and therefore our enrollment) are also effectively capped by constraints on available lab space, as well as by the challenge of finding sufficient qualified part-time instructors to staff our full schedule, given that full time load only covers around 30% of our courses.

B. Enrollment Trends

Enrollment Variables and Trends

	2018-19	2019-20	2020-21	2021-22	2022-23	5-yr %Inc
Unduplicated Headcount	1,980	2,081	2,069	1,895	1,882	-4.9%
Enrollment	3,023	3,219	3,229	2,733	2,796	-7.5%
Sections	113	119	124	105	113	0.0%
WSCH	8,246	9,283	8,845	7,418	7,545	-8.5%
FTES (end of term)	555	621	595	499	503	-9.4%
FTEF (end of term)	16.5	17.2	17.4	15.3	16.2	-1.4%
Productivity (WSCH/FTEF)	501	540	508	485	464	-7.3%

In the data table above, what does the Enrollment trend indicate? For definitions of enrollment terms, please see the glossary (https://www.deanza.edu/ir/documents/Glossary.pdf).

- ☐ the data trend shows an increase in Enrollment
- ☑ the data trend shows a decrease in Enrollment
- ☐ the data trend shows no change and/or flat in Enrollment

Reflect on Enrollment Trends

Discuss the factors that would help the college understand your programs' enrollment trends. How may these trends align with your program mission and goals?

Course offerings in the chemistry department have historically been constrained by limitations on lab space, with lab spaces for our highest demand courses often at or near full utilization. During the first years of the pandemic when in-person classes were suspended, our number of sections offered increased temporarily above what would typically be possible for us, since the restriction on lab space was not an issue that time. Upon returning to all in-person lab instruction in winter 2022, enrollment in our courses was generally strong, though somewhat softer than before the pandemic, since at that time some colleges were still offering online options (despite serious questions about their articulation), which likely drew away some students. We still saw some of this effect in the 2022-23 academic year, but in the current year our enrollment is so far stronger. Lab space constraints make it impossible for our course offerings to support the anomalously high enrollment numbers achieved in 2019-20 and 2020-21 during remote delivery. Nonetheless, the current rebound in enrollment will hopefully allow us to approach the pre-pandemic baseline numbers of 2018-19, which are close to our maximum capacity.

CTE Programs - Statewide and Regional Labor Market Trends

CTE Programs Only

1. Review and summarize the Lightcast Analyst Occupational Outlook data for your CTE program (https://foothilldeanza.sharepoint.com/:f:/s/dactedepartments/EiRTueQ8GrNLqltlQw2twpsBMFCs7X5djTVeo6Jss3W0Jg?e=1ybpmY).

2. Cite current industry trends.

3. Provide an overview of your program advisory committee's recommendations relating to existing and new course and certificate/degree offerings. Cite additional data when applicable.

N/A

D. Course Success

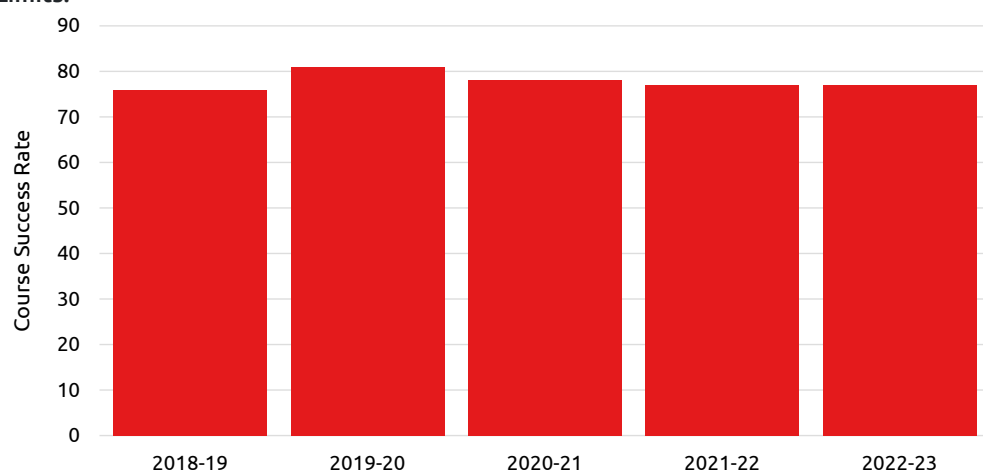saved report - pivot

Course Success

Chemistry-FD

Who uses this report:
All users who want to further explore their enrollment or course success data.

What is this report:
This report is an extension of the Program Review Data Sheet. It has additional student characteristics and users can compare two groups of students at the same time.

Limits:

Limits:

Measures: Enrollments and Course Success Rate and Success Count

	2018-19			2019-20			2020-21			2021-22			2022-23		
	Enrollments	Course Success Rate	Success Count	Enrollments	Course Success Rate	Success Count	Enrollments	Course Success Rate	Success Count	Enrollments	Course Success Rate	Success Count	Enrollments	Course Success Rate	Success Count
Measures	3,023	76%	2,301	3,219	81%	2,608	3,229	78%	2,519	2,733	77%	2,102	2,796	77%	2,141

Data loaded 17-Aug-2023

In the data table above, what overall trends are you seeing in Course Success?

☐　　　　the data trend shows an increase in Course Success

☐　　　　the data trend shows a decrease in Course Success

☑　　　　the data trend shows no change in Course Success

Exploring Course Success Rate Trends

1. What could be factors that influence success rates in your department?

2. What strategies does your department have in place to increase or maintain current success rates?

3. Are there other trends that you see when exploring different courses in the same department (How to access success rates by course: https://www.deanza.edu/ir/documents/How_to_Access_Your_Program_Review_Data.pdf)

4. How do course success rate trends align with your program goals?

1. The largest factors impacting our success rates that have specifically arisen during the period represented in the data are the implementation of AB705/1705 and the ongoing manifestations of pandemic-related learning losses. These factors are layered on top of the significant challenges that many of our students already contend with, both from the standpoint of academic preparedness upon entry into our courses, and outside stressors and obligations that place demands on their finite reserves of time and energy.
2. The department aims to increase student access to support services, as well as to reduce the costs incurred by students who enroll in our courses, since financial stressors represent a significant barrier to student success. Specifically, as reflected in our goals, we hope to expand opportunities for students to serve as embedded tutors in our classes, in hopes of creating a pipeline in which students who have found success in a course can support their peers coming up behind them in navigating its challenges. We also hope to more seamlessly connect students with tutoring opportunities available outside of class time, and build an incentive structure that helps students to see the benefits of allocating some of their limited time to taking advantage of these services.
3. Success rates in our program are lowest in our introductory courses (CHEM 25, CHEM 30A, CHEM 1A), with rates generally increasing as students progress further along in our course offerings.
4. As indicated above, our goal of increasing support for our introductory courses in particular is a direct attempt to address the lower success rates observed in these courses. The likelihood of improving the rate of successful student progression through the program is strongest when a supportive intervention occurs soon after students enter the pipeline, when fundamental skills can be reinforced as they are needed, rather than after the fact.

Course Success with Disproportionate Impact (credit and non-credit)

Limits:　2022-23

Who uses this report:
All users who want to explore student equity and disproportionate impact in course success.

What is this report:
This report highlights student groups with a negative percentage point gap and student groups experiencing disproportionate impact. Data reflects credit sections. Student groups with "N/A" enrollment denotes suppressed data.

How to interpret the data:
A negative percentage point gap means a student group has a lower success rate than the comparison group consisting of all students not in the student group being examined. When a student group is experiencing disproportionate impact, this means that (1) there is a negative percentage point gap and (2) this gap is unlikely to be due to chance. Programs are encouraged to prioritize discussions and address the student groups experiencing disproportionate impact.

New features:
To display only student groups with disproportionate impact, click on the link "Click here to show only groups with disproportionate impact." To add a comparison unit that is one level higher (e.g., course level compared to department level), **be sure to select a college, division, department or course,** then click on the link "Click here to show and compare disproportionate impact with [X]".

Success rate
The number of students receiving an A, B, C or P grade divided by the total number of students receiving a grade. Rate is rounded.

Comparison success rate
The success of all students except for the group being examined (e.g., the comparison success rate for Latinx students is the success rate of all students who are not Latinx). Rate is rounded.

Additional successes needed to erase percentage point
This value provides a way for practitioners to think of gaps in terms of student successes, and illustrates the number of additional successes needed to avoid a percentage point gap.

Legend:

Yellow:　Student groups experiencing a negative percentage point gap that is not statistically significant
Orange:　Student groups experiencing disproportionate impact according to the Percentage Point Gap Minus One (PPG-1) method[1]

Currently showing all groups. Click here to show only groups with disproportionate impact.

Click here to show and compare disproportionate impact with .

Physical Sciences/Math/Engin - Chemistry-FD

Number of sections: 113

2022 Summer to 2023 Spring

Student group	Enrollment at census	Student group success rate	Comparison success rate	Percentage point gap	Chart	Additional successes needed to erase percentage point gap
All Students (Chemistry-FD, 113 sections)	2,796	77%	77%	0		
Asian	1,450	84%	69%	+15		
Black	67	57%	77%	-20	▬ (0–20)	14
Filipinx	200	77%	77%	+0		
Latinx	582	57%	82%	-24	▬ (0–24)	142
Native American	0					
Pacific Islander	19	74%	77%	-3		1
Unknown ethnicity	119	85%	76%	+9		
White	359	79%	76%	+3		
Female	1,573	76%	77%	-1		15
Male	1,181	77%	76%	+1		
Non-Binary	0					
Unknown gender	42	79%	77%	+2		
Foster youth	N/A					
Individuals with disabilities	118	65%	77%	-12	▬ (0–12)	14
Low Income	1,059	70%	80%	-10	▬ (0–10)	105
Not Low Income	1,737	80%	70%	+10		
Veterans	48	67%	77%	-10		5

[1]The PPG-1 method follows the CCCCO method for calculating disproportionate impact. Disproportionate impact is when (1) a student group's PPG value is less than -2 (e.g., -3, -4, -5, etc.) and (2) the absolute PPG value is greater than the calculated margin of error. PPG is calculated by comparing a student group's success rate against the success rates of all students except for the group being examined (e.g., Latinx PPG is Latinx success minus the success of all students except for Latinx students).

In the data table above, what does the data indicate about the Success rate of various ethnic groups within your department compared to the comparison group for the most recent academic year? (i.e., as displayed in the Percentage point gap column)

The Percentage point gap between Asian students and all other students shows:

☐ there is no gap (e.g., 0)

☐ there is a negative gap of 5-percentage points or less (e.g., -5)

☐ there is a negative gap greater than 6 percentage points (e.g., -6)

☑ there is a positive percentage point gap (e.g., +2)

The Percentage point gap between Black students and all other students is:

☐ there is no gap

☐ there is a negative gap of 5-percentage points or less

☑ there is a negative gap greater than 6 percentage points

☐ there is a positive percentage point gap

The Percentage point gap between Filipinx students and all other students is:

☑ there is no gap

☐ there is a negative gap of 5-percentage points or less

☐ there is a negative gap greater than 6 percentage points

☐ there is a positive percentage point gap

The Percentage point gap between Latinx students and all other students is:

☐ there is no gap

☐ there is a negative gap of 5-percentage points or less

☑ there is a negative gap greater than 6 percentage points

☐ there is a positive percentage point gap

The Percentage point gap between White students and all other students is:

☐ there is no gap

☐ there is a negative gap of 5-percentage points or less

☐ there is a negative gap greater than 6 percentage points

☑ there is a positive percentage point gap

The Percentage point gap of one additional group of your choice:

☐ there is no gap

☐ there is a negative gap of 5-percentage points or less

☑ there is a negative gap greater than 6 percentage points

☐ there is a positive percentage point gap

☐ not applicable

Exploring Gaps in Successful Course Completion by Ethnicity

1. What differences do you see in successful course completion rates by ethnicity?

2. What are your thoughts on these differences?

3. Are there other trends that you see when drilling into the data that may be important for your department to explore (e.g., foster youth, individuals with disabilities, low income, veterans)?

4. Which additional student group did you choose to explore and why?

5. How do these trends align with your program's mission and goals?

1. Success rates in our courses are substantially lower for Black and Latinx students than for the student population as a whole, success rates for Asian students and students whose ethnicity is unspecified are higher than the student average. All other listed ethnic groups are near the average, with the exception of Native American students, for whom there is no data.

2. The gap in success rates reflects a variety of systemic factors in the educational system in particular and in society more generally that lead to students from targeted groups being disproportionately likely to arrive in our introductory courses with both a shaky relationship with the fundamental mathematical skills that are reflected in our course advisories, and outside commitments (work, family, etc.) that place limits on the time that can be realistically reserved for coursework.

3. There are also statistically significant success rate gaps for low income students and students with disabilities, relative to the student population at large, though these gaps are less pronounced than those related to ethnicity.

4. Low income students were considered as an additional groups, since these students make up a large fraction of our overall student population, larger than any ethnic group apart from Asian students, and nearly equal to the number of male students in the program. Income constraints are also relevant to our departmental goal of reducing student costs.

5. The departmental goal of providing additional student supports with a focus on our entry level courses reflects the concentration of disproportionately impacted students in these courses. Black and Latino students make up over 35% of students in CHEM 30A and 25% in CHEM 25, dropping to below 20% in CHEM 1A and to single digits by the end of CHEM 12. Focusing on CHEM 30A/25/1A maximizes the extent to which we can improve success rates for disproportionately impacted student groups.

Teaching and Learning Strategies

1. What teaching and learning strategies might be helpful in narrowing any gaps in successful course completion?

2. How do the listed teaching and learning strategies align with your program's mission and goals?

1. Due to both the aforementioned impacts of AB705/1705 and the ongoing fallout of learning loss during pandemic-related closures, the effects of which are impossible to fully disentangle, our instructors must now operate to some extent as *de facto* math instructors for an increasing proportion of students who arrive without a clear grasp of quantitative relationships and symbolic representation (both within and outside of mathematical problems), which are encompassed in the intermediate algebra advisory attached to our courses. The teaching of algebra (or in some cases pre-algebra or simple arithmetic) is quite different from the teaching of chemistry, and chemistry faculty are not always familiar with the best strategies for approaching these topics at the level many students need, leaving the math as a challenging barrier that students must overcome before they can even begin to focus on the chemistry. While this barrier cannot be removed--understanding and developing meaningful models of physical systems that have predictive power intrinsically requires familiarity with some mathematical language--instructors can take steps to more explicitly introduce relevant mathematical concepts as they appear, and to connect students with supplemental math resources (vetted online tutorials, introductions to available tutoring services, collaborations with math faculty, etc.) to provide an on-ramp for students needing math support beyond what can realistically be provided within the scope of our own courses.

2. The departmental goal of providing targeted supports for students in our entry level courses is directly aimed at the challenges underlying the persistent success gaps in these courses, where students in disproportionately impacted groups are most heavily represented. Helping to ensure that students are able to make successful progress toward their STEM-related transfer and career goals requires a focus on bridging the underlying quantitative skill divide that hinders them from being able to interact meaningfully with course content in scientific fields. In building the basic mathematical skills required to succeed in our early courses, students can also build confidence in their ability to navigate an information-rich and data-driven world in ways that extend beyond the confines of STEM classrooms into broader efforts to address issues of interest to them in meaningful and productive ways.

Trends in Awards

saved report - pivot

Degrees and Certificates by Ethnicity

Who uses this report:
All users who need degree and certificate data.

What is this report:
This report provides the degree and certificate counts by college, division and department. Additionally, all users could explore degree and certificate awarded by ethnicity and gender.

Data loaded 24-Oct-2023
No data returned for the criteria selected

In the data table above, what are the trends in regard to the number of awards within your program?

Trends in Associate Degrees awarded show:

☐   an increase in the number of Associate Degrees awarded

☐   a decrease in the number of Associate Degrees awarded

☐   no change in the number of Associate Degrees awarded

☑   Not applicable

Trends in Associate Degrees for Transfer awarded show;

☐   an increase in the number of Associate Degrees for Transfer awarded

☐   a decrease in the number of Associate Degrees for Transfer awarded

☐   no change in the number of Associate Degrees for Transfer awarded

☑   Not applicable

Trends in Credit Certificates awarded show:

☐   an increase in the number of Credit Certificates awarded

☐   a decrease in the number of Credit Certificates awarded

☐   no change in the number of Credit Certificates awarded

☑   Not applicable

Trends in Non Credit Certificates awarded show:

☐   an increase in the number of Noncredit Certificates awarded

☐   a decrease in the number of Noncredit Certificates awarded

☐   no change in the number of Noncredit Certificates awarded

☑   Not applicable

Reflecting on Trends in Awards

1. What trends do you see across awards in your department?

2. How do the trends in awards align with your program's mission and goals?

> N/A

Reflecting on Award Offerings

1. For each program leading to an award, identify any courses that have not been offered in the last two years. Briefly explain why the courses have not been offered. For courses that will not be offered, how does your program plan to update the program so that students can complete the requirements?

2. Based on a review of course offerings and the number of awards offered and conferred, is your department planning on removing any degrees or certificates from the college catalog? If so, please list those being removed and a short explanation as to why.

3. Does your department have any plans to offer new degrees or certificates? If so, please list and provide a short explanation as to why.

> 1. N/A
> 2. N/A
> 3. The department does not currently offer any degrees or certificates. While we would like to offer a transfer degree, and have explored the option on several occasions, the unit cap has thus far made it impossible to do so. We continue to monitor pathways developed at other institutions, but have not found a model for an ADT that transfers to the quarter system at De Anza given the current unit values for key courses. We hope to implement AS degrees in chemistry and biochemistry in the near future as stated in our program goals.

Staffing Trends

Faculty Workload

	2018-19	2019-20	2020-21	2021-22	2022-23	5-yr %Inc
Full Time Load	5.4	5.4	4.9	5.1	4.8	-11%
Full Time %	32.7%	31.2%	28.0%	33.4%	29.6%	-10%
Overload	2.1	2.6	2.6	2.7	2.6	24%
Overload %	12.7%	15.1%	14.9%	17.9%	16.0%	26%
Part Time Load	9.0	9.2	9.9	7.5	8.8	-2%
Part Time %	54.6%	53.7%	57.1%	48.7%	54.5%	0%
Total FTEF	16.5	17.2	17.4	15.3	16.2	-1%

What trends do you see in the last five years in regard to the Full Time %? (i.e., percentage of classes being taught by full time faculty, not including overload or summer)

☐ the data trend shows an increase in Full Time %

☑ the data trend shows a decrease in Full Time %

☐ the data trend shows no change in Full Time %

Staffing Needs

Provide a brief overview of your department's staffing needs. Personnel requests are to be submitted on a separate form.

1. What are full time faculty needs to ensure the program's health, growth or vitality?

2. What are classified staffing needs to ensure the program's health, growth or vitality?

3. What strategies does your program have in place to ensure students are being successful when faced with the current staffing ratios?

4. What strategies does your program have in place to retain new faculty, if applicable?

1. The department has great need for additional full-time faculty. Our full-time percentage during the 2022-23 academic year dipped below 30% again, and this is expected to be meaningfully lower in the current academic year as faculty members undertake service to the college in various areas, increasing their amount of release time relative to prior years. Additionally, several of our FT faculty are expected to take professional development leave soon, decreasing the FT workload to under 25% of course load. Even if all FT faculty were teaching their full load, the percent of FT faculty would be at 35%. This clearly demonstrates the serious need for additional FT faculty and is discussed further in our personnel request.

2. In order to offer a lab program consistent with our CORs and articulation expectations across all lab sections it is essential to maintain current staffing levels with two full-time laboratory technicians with expertise in chemical preparation and instrument maintenance. It is critical to ensure that our stockroom is staffed during hours when lab classes are in session to ensure an efficient and safe program.

3. The department is fortunate to have a contingent of experienced and dedicated part-time faculty members, though it has been difficult to find new faculty to replace recent PT retirements and departures. This difficulty has threatened course cancellation several times. Our lab technicians are working to minimize the impact of reduced stockroom support on the student experience, though there are unavoidable impacts when some labs are being run with no stockroom staff present. This requires instructors to lose class time when equipment or chemical needs arise during the lab.

4. N/A

Assessment Cycle

Student Learning Outcomes Assessment Cycle

Navigate to https://www.deanza.edu/slo/#post which will take you to an accordion listing of SLO assessments under "Student Learning Outcomes and Assessments Summaries by Division"

1. Summarize the dialogue that has resulted from SLO and/ or PLO assessments.

2. What specific strategies has your department implemented, or plan to implement, based on the results of the SLO/PLO assessments conducted?

3. How do these strategies align with the program's mission and goals.

1. The department noted that many of the SLOs listed for our courses are very broad, allowing wide latitude for faculty interpretation in determining an appropriate assessment for those SLOs. Due to the potential for significant variation is assessments given across the department, and the difficulty of making meaningful comparisons across data sets as a result, the department aims to institute a regular mechanism for faculty to confer about how individual SLOs are being assessed.

2. The department aims to establish a schedule for discussing SLO assessments as a part of department meetings, with a focus on any courses that are up for curriculum revision in the subsequent academic year. We also plan to take steps to increase the uniformity of assessments, either through departmental discussion to outline general parameters for crafting assessments of specific SLOs, or perhaps by creating a limited library of specific assessment questions for each SLO that faculty can choose from when performing assessments.

3. Engaging in regular dialogue around our SLOs and assessments will allow us to both identify specific areas where students struggle to meet outcomes, a key factor in differential attrition rates among disproportionately impacted groups in our introductory courses in particular. With respect to the laboratory curriculum in particular, evaluating the appropriateness of lab-related SLOs on a rolling basis

will allow us to identify avenues for updating our experiments and the corresponding SLOs to be relevant to the skills that are most relevant for students to take away from our courses to prepare them to operate in a modern laboratory environment.

Dean/Manager Comments

The department has done a good job analyzing the data and setting a plan for future. Creating ADT for chemistry, having additional fulltime faculty, and finding ways to increase the success among Black, Latinx, and students with disabilities is on top of the priorities for the department. .

STOP. Do not submit form. Please inform your dean/manager when the form is complete. They will submit the form when they have added their comments above.

This form is completed and ready for acceptance.