COMPREHENSIVE PROGRAM REVIEW TEMPLATE

I - MAIN

Overview
Academic Year: 2025-2026
Originator : Moller, Rachel
Division: Division 20 - Science, Technology, Engineering, and Math
Department: Chemistry

II - CO-CONTRIBUTORS

1) None

III - PROGRAM MISSION AND ACCOMPLISHMENTS

Gavilan College Mission Statement: *Through equitable access and comprehensive support in a welcoming inclusive environment, Gavilan College guides students of diverse backgrounds to achieve academically and pursue lifelong learning. We prepare students for transfer success, career advancement, and meaningful community participation*.

1. Provide a brief overview of how the program contributes to accomplishing the mission of Gavilan College. In addition to a basic overview of your program's structure and services, be specific in connecting your program's services to elements of the mission statement (300 words or less).
   The chemistry program allows students to investigate properties and the ways in which they interact, combine, and change. The program engages students by helping students develop logical and critical thinking skills using the principles of Bloom's taxonomy (**academic potential**) and helps students make career choices (**social and economic potential**). We offer courses for non-majors who need the GE, majors who may want to transfer to a 4-year college, and health science students who seek a career in nursing/allied health. The STEM III grant supports our efforts by offering supplemental instruction for many chemistry courses (**academic and social potential**), faculty mentors who meet with students throughout the semester (**academic and economic potential**), and a STEM Center to serve as a space for learning and collaboration with other students and faculty (**academic and social potential**).
2. On the PIPR website, locate and review your previous program plan and subsequent annual updates. After reviewing, enter your previous goals below and comment on the progress/accomplishments of each goal. (Enter each goal separately)
   Previous Goal: Create community and industry partnerships to create more job/internship opportunities for chemistry students
   Status: In Progress. 63 students participated in internships in Summer 2025: 27 at Gavilan 32 at SJSU, and 4 at CSUMB. We are terminating the internships for the summer of 2026 due to the loss of grant funds via the federal government. From 2024 to 2025,

there was an increase of six students that participated in internships along with CSUMB added as an internship location.

Previous Goal: Institutionalize grant efforts (tutoring, tutor training, STEM Counselor, etc.)
Status: In Progress

Previous Goal: Increase the overall success rate in chemistry to 80%
Status: In progress. The student success rate in chemistry has steadily increased over the last three years, however the desired 80% success rate is not quite being met. Chemistry 30A is the only course that is below the 80% success rate, however it has increased from a success rate of 68% in 22-23 to 71% in 24-25.

3. Have the services or courses of your program changed over the past three years? Please explain (300 words or less).
   The STEM program at Gavilan College has experienced several notable changes over the past three years, particularly with its integration of new support services, academic pathways, and initiatives aimed at improving student success and workforce readiness. One of the significant changes has been the increased of conference attendances for students in Chemistry. For example, a dedicated STEM counselor was introduced, providing tailored academic and career guidance. Additionally, the college launched the NSF-funded Circle of Champions project, which aims to expand access to STEM resources and mentor support for underrepresented groups. Further strengthening the STEM pathway, the hiring of a STEM Career and Academic Pathways (CAP) Specialist has helped improve student engagement and transition from education to career opportunities. This position works closely with local transfer institutions and industry partners to develop internship opportunities, providing real-world experiences and increasing employability. In line with the broader goals of the college, the integration of these services aligns with strategic efforts to streamline STEM degree requirements through Guided Pathways. These programs have gotten more students into chemistry.

IV - STUDENT AND PROGRAM OUTCOMES

College Goal for Student Achievement

The following questions refer to data regarding student achievement. To access program review data, go to the Program Review Data Matrix website .

1. **(Instructional Only)** Find your program's course success information. Consider your program success rate trends over the last three years. Compare your overall success to the college average. Are these rates what you expected after comparing with the college average? Are there any large gaps? Is there anything surprising about the data? What trends are suggested by the data?

	2022-2023	2023-2024	2024-2025

Chemistry Enrollment	419	507	581
Chemistry Success	75%	78%	78%
College Enrollment	30,222	37,125	38,613
College Success	72%	72%	73%

The success rate of students in Chemistry courses are slightly above the overall Gavilan College success rate. The number of students enrolled in STEM courses is steadily increasing. The demand STEM classes require from students is great, so to be close to the campus success is expected.

2. **(Instructional Only)** Now find your program's persistence information. Consider your retention rate trends over the last three years. Compare your overall retention to the college average.

Persistence Rate (term to term)	**2022-2023**	**2023-2024**	**2024-2025**
Chemistry	80%	84%	85%
Gavilan College	87%	84%	85%

The persistence rate for STEM courses is below the overall Gavilan College success rate. The number of students enrolled in STEM courses is steadily increasing. The demand STEM classes require from students is great, so to be close to the campus success is expected.

3. Are these rates what you expected after comparing with the college average? Are there any large gaps? Is there anything surprising about the data? What trends are suggested by the data.

   The data reveals that chemistry students are increasing in persistency. Over the last three years, the chemistry persistence rate has caught up to the college persistency rate.

Success

The following questions refer to data regarding student achievement. To access instructional program review data, go to the Program Review Data Matrix website.

4. **(Instructional Only)** What are your set goals for course success? Do your individual course and program rates meet this goal? Helpful Question: If your rates for success are lower than your goals, what are your plans to improve them (200 words or less)?

Program Success Rate	**2022-2023**	**2023-2024**	**2024-2025**

Chemistry	75%	78%	78%

The overall goal of the chemistry department is to have a success rate of at least 80%. Chemistry 1A, 1B, 12A, and 12B are over the goal of 80% success rate. Chemistry 30A has had a much lower than desired success rate (about 71%). Improvements for the chemistry 30A course would be to include embedded tutoring, more outreach about tutoring services, and have an increased use of online resources.

5. How many students did your area serve (if you don't have an exact count, please provide an estimate)? How did they perform in comparison to those that did not use your services, if applicable? (200 words or less)

Program Success Rate	**2022-2023**	**2023-2024**	**2024-2025**
Chemistry Enrollment	419	507	581
STEM Enrollments	4,766	5,314	5,925
Declared STEM Majors	459	582	609

As mentioned above, number of students enrolled in chemistry courses is steadily increasing. The demand of chemistry classes require from students is great, so to be close to the campus success is expected. This trend also follows the same trend the STEM department is observing.

6. Given this information, how has your service or area supported student success and retention over the past three years? (200 words or less)
    - **Targeted Support Services**: The STEM division has prioritized the implementation of various support services aimed at addressing the unique needs of its students. Key initiatives include the establishment of chemistry tutors and embedded.
    - **Research and Internship Opportunities**: Efforts to expand hands-on research and internship opportunities have been central to improving workforce preparedness. This includes collaborations with local tech companies to provide real-world experiences through internships. Moreover, the STEM division has set goals for increasing undergraduate research projects and industry internships to further enrich student engagement which allows chemistry students to engage in more hands on research.
    - **Engagement with Local High Schools**: The division has also focused on strengthening partnerships with local high schools to offer dual enrollment courses, thereby enabling students to complete foundational chemistry coursework earlier in their academic journey.
    - **Inclusive and Flexible Learning Models**: In response to diverse student needs, the chemistry courses has implemented hybrid and HyFlex learning models.
7. In your area, what trends do you see and what initiatives need to be developed to

support success and retention? (200 words or less).
Chemistry at Gavilan College has demonstrated strong success and retention rates. There are several trends and opportunities for further development:
1. **Trends in Enrollment and Success**: Chemistry seen steady growth in enrollment and success rates, especially among Hispanic, Black, and FilipinX students.
2. **Need for Enhanced Support Services**: While the STEM Center and tutoring services have contributed positively to student success, there is an ongoing need to expand these resources. Increasing personalized support, such as mentoring and more targeted interventions, would help further bridge the achievement gaps.
3. **Strengthening Pathways**: Expanding dual enrollment opportunities and developing structured, guided pathways for chemistry majors are essential to increase transfer readiness and early exposure to chemistry careers. Initiatives that integrate career exploration with coursework and provide additional hands-on research or internship experiences and attending conferences will further improve retention and workforce readiness.

V - EQUITY

Gavilan College has identified the following populations as experiencing disproportionate outcomes: Males, African American, Native American, Students with Disabilities and Foster Youth.

1. Examine your equity data over the last three years. Comment on what your program has done to address any differences or gaps in the past three years. What has worked? What has not worked? (200 words or less) Helpful Questions: What current factors or potential causes can be connected to these areas of disproportional impact? How might your program or department address student equity gaps? How can your area help increase disproportionate student success? (200 words or less)?
   Over the past three years, the STEM division at Gavilan College has worked to close equity gaps by implementing targeted support programs and resources.

Ethnicity Success Rate	2022-2023	2023-2024	2024-2025
Black, Latinx, FilipinX	72%	77%	77%
Asian, Native American, Pacific Islander, White, and Decline to State Students	85%	84%	83%

2. **(Instruction Only)** Find your Distance Education success information. If distance education is offered, consider any gaps in success rates between distance education and face-to-face courses. Do you notice any trends? Do these rates differ? If disparity exists, how do you plan on closing the achievement gaps between distance education and face-to-face courses (300 words or less)?

What Has Worked:

1. Chemistry Support Services: The STEM Center, tutoring programs, and faculty mentoring have helped improve retention and success rates, particularly for first-generation students.
2. Targeted Interventions: Programs such as supplemental instruction and embedded tutoring has helped student success and retention in the STEM department.
3. Guided Pathways & Counseling: Strengthening academic advising and career pathways has helped students stay on track, contributing to an increase in persistence rates from 72% to 77%.

What Has Not Worked:

1. Gaps in Outreach: Despite efforts, underrepresented groups still have lower success rates, indicating a need for earlier intervention.
2. Retention in STEM Majors: While enrollment has increased, persistence in advanced STEM courses remains a challenge. Moving forward, expanding internship programs and culturally responsive teaching strategies will be key to further closing these gaps.

3. Our 2023 Equal Employment Opportunity (EEO) Plan States: *"Gavilan Joint Community College District (District) is dedicated to proactively cultivating and sustaining a welcoming and inclusive work environment. The District aspires to be Diverse, Purposeful, Inclusive, and Equitable, as reflected in the District's Principles of Community. The District values the worth and dignity of every person, the pursuit of truth, the acquisition of knowledge, and the nurture of democratic citizenship. These values provide the foundation for an environment of civility, honesty, cooperation, and professionalism."*

   What is your area doing to support district efforts in creating an inclusive college environment? With what programs are you partnering? Did you identify barriers and institute change? How are you creating/ ensuring diversity in your program or in the classroom? **(300 words or less)** *(Some examples might be sponsoring cultural events and diverse speakers on issues dealing with diversity, exploring how to infuse diversity into the classroom and curriculum, integrating diversity into the evaluation of employees, promoting learning opportunities and personal growth in the area of diversity, or evaluating how the physical environment can be responsive to diverse employee and student populations.)*

   The STEM division will expand culturally responsive support services, including increased bilingual STEM counseling, enhanced tutoring and mentoring programs, and targeted interventions in high-failure courses. We will strengthen dual enrollment with high schools serving underrepresented students and develop STEM summer bridge programs to improve college readiness. Additionally, we will secure more scholarships, paid internships, and research opportunities to reduce financial barriers. Faculty will receive training in equity minded teaching, and we will expand flexible course offerings, including hybrid and HyFlex options, to meet diverse student needs.

4. How do you plan on addressing issues of student and employee equity? In other words, how do you plan on creating opportunities for success of students who have historically been underserved? How do you plan to address EEO outcomes in your employee hires?

   To ensure diverse hiring, we will implement targeted recruitment strategies to attract underrepresented faculty and staff in STEM. EEO training for hiring committees will be required to mitigate bias, and we will strengthen mentorship programs to support new

hires from diverse backgrounds. Ongoing Diversity, Equity, and Inclusion (DEI) training will be promoted to faculty and staff to foster an inclusive workplace. By focusing on these strategies, we aim to close achievement gaps, increase representation, and create an equitable and supportive STEM environment for both students and employees

VI - LEARNING AND AREA OUTCOME

Have you reviewed all your Learning and Area Outcomes to ensure that they remain relevant for evaluating the performance of your area?

1. Are your SLOs, PLOs, SAOs, and ILOs mapped in CurriQunet? NO
2. Are your SLOs, PLOs or SAOs up-to-date in CurriQunet? YES
3. Have all of your SLOs, PLOs or SAOs been assessed in the last five years? YES
4. Have you reviewed all of your SLOs/SAOs to ensure that they remain relevant for evaluating the performance of your program? YES
5. If you answered No to any of the above questions, what is your plan to bring SLOs/PLOs/SAOs into compliance?
   Currently, there is no ability to map SLOs to ILOs on CirricUNET

VII - OUTCOME ASSESSMENTS

Review Outcomes data located in CurricUNET Assessment Area. After you have examined your results, what do your findings suggest?

1. Student Learning Outcomes (SLO) or Service Area Outcomes (SAO) Review the SLOs or SAOs assessment data located in CurriQunet. What improvement do you plan to implement based on your assessment data and when will you implement these changes and how will you know they are successful?
   There is no assessment data provided.
2. Institutional Learning Outcomes (ILO) How do your SLOs/SAOs support the college ILOs or how do your PLOs support the college ILOs? Be specific.
   Critically thinking and creativity: The chemistry courses offered at Gavilan involve complex problem-solving topics. Since chemistry is a physical science, it is fact-based coursework. Students are expected to synthesize chemical compounds in the laboratory portion of the course. Students are also expected to formulate ideas and hypothesis from what is being learned in the classroom. Communicate effectively: Both the students and instructors in the chemistry department are respectful to one another. Both the students and instructors listen to one another and are always actively learning. Practice social responsibility: Students work together in and out of the classroom, to reach a common goal; understanding the material. The instructors work with the students as well, to ensure that the students have the tools and knowledge they need to be successful. The chemistry department ensures that students feel safe and welcome and respect diversity. Cultivate well-being: Although rigorous material, the chemistry department values students' mental and physical

health and ensure that students are able to balance their education with their personal lives. The chemistry department affirms and promotes positive individual and communal identities through creating a collaborative work environment.

3. Are you meeting your SLO/SAO success outcomes? What patterns stand out in your results? If your SLO/SAO results are lower than expected, what are your plans to improve them?

   The success goals for chemistry courses are as follows:

Course	Success % 22-23	Success % 23-24	Success % 24-25	Meeting Goal
Chemistry 30A	68%	70%	71%	No
Chemistry 1A	82%	84%	90%	Yes
Chemistry 1B	91%	93%	89%	Yes
Chemistry 12A	81%	85%	85%	Yes
Chemistry 12B	100%	100%	89%	Yes

The outlier is chemistry 30A, which is below the desired success goal. Plans to improve this goal is to ensure students have access to tutoring through the STEM center. Since chemistry 30A is an introductory level chemistry course, it is important that students have the tools they need to be successful in the modality the course is offered. If face-to-face, it is important that the students are able to attend all lectures to not get behind on the material. If the course is offered as a hybrid course, where the lecture is online, it is important that the Canvas course is easy to navigate and the expectations and deadlines are clear. The success rate for chemistry 30A is steadily increasing, which means that the tools are working, however we can implement more in order to increase the success rate more quickly.

VIII - CURRICULUM AND COURSE OFFERINGS ANALYSIS

1. Are there plans for new courses or educational awards (degrees/certificates) in this program? If so, please describe the new course(s) or award(s) you intend to propose (200 words or less).
   - Develop an honors course for organic chemistry
2. Provide your plans to either inactivate or teach each course not taught in the last three years (200 words or less).
   - None
3. Consider and analyze your location, time, and delivery method trends. Are classes offered in the appropriate sequence/available so students can earn their degree or certificate within two years? Are courses offered face-to-face as well as have

distance education offerings? Are they offered on the main campus as well as the off-site areas? Different times of day? (300 words or less).

In the STEM Division, where students take courses from multiple programs simultaneously, the chair and dean work closely together to set a schedule that eliminates conflicts and allows students to take the needed courses and graduate on time. STEM programs at Gavilan College are carefully scheduled to ensure students can complete their required courses within two years. Faculty members from the biology, chemistry, engineering, and physics areas collaborate to avoid conflicts between major classes, ensuring students progress through their programs efficiently. This coordination is critical, especially in STEM fields where sequential course offerings are necessary for timely completion. The STEM Division offers courses across multiple modalities, including traditional in-person formats, fully online options, and hybrid classes. We offer Biology, Chemistry, Ecology, and Math courses at the new Hollister site.

IX - PROGRAM AND RESOURCE ANALYSIS

1. Please list the number of Full and Part Time faculty, staff and/ or managers/ administrator positions in this program over the past three years. Focus on your individual program.
   Select Year 1: 2023-2024
   Number of Full Time Faculty: 1
   Number of Part Time Faculty: 5
   Number of Full Time Classified Professional: 0
   Number of Part Time Classified Professional or Student Worker: 1
   Number of Full Time Manager, Confidential or Administrator: 1
   Number of Part Time Manager, Confidential or Administrator: 0
   Select Year 2: 2024-2025
   Number of Full Time Faculty: 1
   Number of Part Time Faculty: 5
   Number of Full Time Classified Professional: 0
   Number of Part Time Classified Professional or Student Worker: 1
   Number of Full Time Manager, Confidential or Administrator: 1
   Number of Part Time Manager, Confidential or Administrator: 0
   Select Year 3: 2025-2026
   Number of Full Time Faculty: 1
   Number of Part Time Faculty: 5
   Number of Full Time Classified Professional: 0
   Number of Part Time Classified Professional or Student Worker: 1
   Number of Full Time Manager, Confidential or Administrator: 1
   Number of Part Time Manager, Confidential or Administrator: 0

2. How have and will those with reassigned time, grant commitments and activity, projected retirements and sabbaticals affect personnel and load within the past in the next three

years? What future impacts do you foresee? (200 words or less)
None

3. Additional Comments: None

X - EVALUATION OF RESOURCE ALLOCATIONS AND PROGRAM EFFICIENCY

1. List the resource allocations from all sources (e.g., annual college budget request appropriations, Guided Pathways funds, grant funds, etc.) received in the last three years. **For annual college budget request appropriations, reference your previous three-year plan and annual updates. Do this for the last three years.**
   Select Year 1: 2023-2024
   Number of Students Served. *How many students did your area serve in this year (if you don't have the exact count, please provide an estimate)? 507 unduplicated headcount*
   Total Allocation (Irrespective of Funding Source
   Funding Source **(select all that apply)**
   Unrestricted General Fund: ☐
   Grants & Categorical Programs: ☒
   Other Funds: ☐

   Total Spent (Irrespective of Funding Source): $433,195.74

   Select Year 2: 2024-2025
   Number of Students Served. *How many students did your area serve in this year (if you don't have the exact count, please provide an estimate)? 581 unduplicated headcount*
   Total Allocation (Irrespective of Funding Source):
   Funding Source **(select all that apply)**
   Unrestricted General Fund: ☐
   Grants & Categorical Programs: ☒
   Other Funds: ☐

   Total Spent (Irrespective of Funding Source): $448,202.60

   Select Year 3: 2025-2026
   Number of Students Served. *How many students did your area serve in this year (if you don't have the exact count, please provide an estimate)? 636 unduplicated headcount*
   Total Allocation (Irrespective of Funding Source): Click or tap here to enter text.
   Funding Source **(select all that apply)**
   Unrestricted General Fund: ☐
   Grants & Categorical Programs: ☒
   Other Funds: ☐

   Total Spent (Irrespective of Funding Source): $304,699.07

2. Please evaluate the effectiveness of the resources utilized for your program. How did these resources help student success and completion? (200 words or less)
   The costs for the chemistry program are within the supply budget of $4,000.00 annually. Most glassware and chemicals are already purchased. The 2023/2024 years are projected

since there is no data on how many students have been served during those years.

3. Evaluate your program costs. Are your costs in alignment with your budget? If not, what improvements can be made? Please explain any trends in spending, inconsistencies and unexpected results. (200 words or less)
   Yes, our costs are in alignment.

XI - INTEGRATED PLANNING AND INITIATIVES

1. What other areas is your program partnering with (i.e. guided pathways, grant collaboration, etc.) in new ventures to improve student success at Gavilan College? What is the focus of this collaboration? Helpful question: What are the program and your Integrated Planning/ Guided Pathways partners' plans for the next three years? **(200 words or less)**
   The chemistry department works closely with the other natural science programs as well as math to develop a STEM community at Gavilan. Chemistry is an integral part of the STEM guided pathway. The chemistry program also works closely with the STEM center at Gavilan College to build more tutoring support for the chemistry courses, since there is a lack of. The focus of this partnering is to improve the success rate of the chemistry courses, especially for chemistry 30A, which still working on achieving the goal success rate of the chemistry program. The chemistry program is also planning on putting forth effort in improving online education tools (such as LMS, open-education resources) for students to be able to navigate online learning. Chemistry is also actively working on making chemistry courses accessible for those who do not think they can succeed in an online or hybrid learning environment.

XII - OTHER OPPORTUNITIES AND CHALLENGES

1. Review for opportunities or threats to your program, or an analysis of important subgroups of the college population you serve. Examples may include environmental scans from the Education Plan/Strategic Plan, changes in matriculation or articulation, student population, community and/ or labor market changes, etc. **Helpful Question:** What are the program plans for the next three years? **(200 words or less)**
   The chemistry department will be looking for new part-time faculty. The chemistry program wants to expand but need sufficient facilities, lab tech support, and part-time faculty to anchor the program and ensure a successful expansion, especially at the Hollister site.
2. What are you discovering about instruction and/or services in a remote environment that you would want to maintain post-pandemic? **(300 words or less)**
   The need for online coursework is evident. Students prefer to have chemistry lectures asynchronous, so they can continue their education while working to financially support themselves. If the coursework remains hybrid, there needs to be some support the students can receive inside the classroom, likely during their scheduled

laboratory meeting period.

3. What kinds of issues are exacerbated or emerging that are likely to remain, unless addressed? **(300 words or less)**
   Students need extra educational support around very demanding chemistry course work. Time management seems to be a concern. Another concern that is emerging is the ability for students to retain information. This can be addressed through more instructor support during the scheduled lab periods and assigning different types and styles of work.

XIII - NEW GOALS

The PIPR/RAP committee will rank each goal according to a rubric based on two main criteria: the alignment of the goal with the college's mission statement, strategic plan, and student learning outcomes (SLOs) or service area outcomes (SAOs). If resources are requested, complete the Resource Request section.

Goals are designed to be **Specific, Measurable, Achievable, Relevant, and Time-bound** for each functional area. See example below;

- **Instructional Program Goal:** Reduce the equity gap in successful course completion (grade of 'C' or better) between Historically Underserved Student Subgroups and the overall student population in all required gateway transfer-level Math and English courses by **5 percentage points** compared to the 2024-2025 baseline, by the **end of the Spring 2027 semester.**
- **Student Services Goal:** Increase the percentage of first-time, full-time students who successfully complete both a comprehensive Student Educational Plan (SEP) and a financial aid application (FAFSA or Dream Act) from the current baseline of 68% to **80%**, to be achieved by the **Census Date of the Fall 2026 semester.**
- **Business Services Goal:** Reduce the average processing time for standard purchase requisitions (PRs), from internal department submission to final approval, by 50%—moving from a baseline average of 14 business days to **7 business days**—by **December 31, 2026**, through the optimization of the electronic workflow system.

Copy and paste to Enter more than one Goal

- **Goal (*One Sentence Limit*):** Improve Equity in the Chemistry Curriculum
- Alignment to Strategic Goal **Goal 2: Equity, Access, and Inclusion - With equity at the forefront, build inclusive spaces and curriculum that honor, support, and respect diverse student populations.**
- Alignment to SLO or SAO (*Enter Department SLO or SAO that aligns to this goal*): Improve Equity
- Describe the connection of Goal to Mission Statement, Strategic Plan and SLO/SAO Results: working towards an environment where all students are achieving their goals
- Proposed Activity to Achieve Goal: If we can identify the causes/factors, we can address this equity gap.
- Responsible Party (One Sentence limit): Dean, STEM Dept Chair, full time chemistry

faculty.

- Timeline to Completion: Semester/Year: May 2027
- How Will You Evaluate Whether You Achieved Your Goal (Two sentence Limit): This goal can be evaluated through data and the success rate of these populations.

XIV - RESOURCE REQUESTS

Copy and paste to add more than 1 requests

1. Request Name (short title): Tabletop Nuclear Magnetic Resonance Instrument
2. Request amount: $75,000.00
3. Type of Request: Non-Personnel
4. Alignment to Goal(s) in section XIII (*enter goal from above)*Increase Achievement and Improve Employment
5. Is this a one-time or ongoing expense? One-Time
6. Category of Request Educational instrument for student use

If Personnel is Selected in question 3, select from the following all that applies

- Full-Time Faculty ☐
- Part-Time Faculty☐
- Faculty Special Assignment or Reassigned Time☐
- Full-Time Classified Professional☐
- Part-Time Classified Professional or Student Worker☐
- Full-Time Manager, Supervisor, Confidential☐
- Part-Time Manager, Supervisor, Confidential☐
- Professional Experts☐

If Non-Personnel is Selected in question 3 select from the following all that applies;

- Instructional Equipment ☒
- Instructional Software ☒
- Instructional Supplies, Materials and Textbooks ☐
- Non-Instructional Equipment ☐
- Non-Instructional Software ☐
- Non-Instructional Supplies and Materials ☐
- Professional Development ☐
- Travel and Conference ☐
- Professional or Contracted Services ☐
- Repairs and Maintenance ☐
- Other ☐

7. *The committee will separate goals with resource requests. Requests will be categorized into two groups: those to be ranked and those not ranked. The requests not ranked include Safety, Compliance, Personnel, and Position.*
   Which of the following best describes your requests?
   Choose an item.
8. Provide a complete description, justification, or rationale for the requested amount. Describe how it aligns to the selected goal(s) and your responses to the above questions. (300 words)

The requested funds will be used to acquire a nuclear magnetic resonance (NMR) instrument dedicated exclusively to student use, which is essential for achieving the selected goals of expanding education capacity, improving data quality, and strengthening hands-on training. NMR spectroscopy is a core analytical technique for molecular structure determination, purity assessment, and quantitative analysis in chemistry experiments and research and is important for students to be prepared for the workforce post education.

At present, there is no NMR instrument available at our facility. Not having access to a NMR machine adds constraints significantly hinder student-driven research and education, reduce experimental flexibility, and limit the scope of projects that can be undertaken.

Establishing an on-site NMR instrument will provide students with consistent, independent access to this essential technology, enabling timely data collection, real-time troubleshooting, and rapid iteration of experiments. The instrument will support multiple student-led projects, including molecular synthesis, reaction mechanism studies, materials characterization, and biomolecular analysis. By being designated solely for student use, the NMR will maximize educational impact while ensuring equitable access for undergraduate and graduate researchers.

Beyond research productivity, the NMR instrument will serve as a critical training tool, allowing students to gain hands-on experience with industry-standard equipment and data analysis. This experience will enhance technical competency, data literacy, and workforce readiness. Overall, the requested amount is justified by the absence of current NMR access at our facility and by the instrument's central role in advancing student education, research excellence, and long-term academic and career outcomes.

XV - ADDITIONAL QUESTIONS

Please consider providing answers to the following questions. While these are optional, they provide crucial information about your equity efforts, training, classified professional support, and recruitment.

1. Does your division (or program) provide any training/mentoring for faculty and/ or classified professionals regarding professional development? **Click or tap here to enter text.**
2. If there is a need for more faculty and/ or classified professional support in your area, please provide data to justify request. Indicate how it would support the college

mission and college goals for success and completion. **Click or tap here to enter text.**

3. What, if anything, is your program doing to assist the District in attracting and retaining faculty and classified professionals who are sensitive to, and knowledgeable of, the needs of our continually changing constituencies, and reflect the make-up of our student body? **Click or tap here to enter text.**
4. Are there program accomplishments/ milestones that have not been mentioned that you would like to highlight? **Click or tap here to enter text.**
5. Please share any recommendations for improvements in the Program Integrated Plan and Review process, analysis, and questions. Your comments will be helpful to the PIPR Committee and will become part of the permanent review record. **Click or tap here to enter text.**

XVI - EXECUTIVE SUMMARY

Please provide a brief executive summary regarding program trends and highlights that surfaced in the writing of this report. Summarize, using narrative, your program goals for your next three years. Your audience will be your Peer Review Team, the program review Committee, President's Cabinet, Dean's Council, ASGC, Academic Senate, Budget Committee and Board of Trustees (300 words or less).

The chemistry department is still working on increasing the overall success rate in the courses. Since the last comprehensive program update, completed in the spring of 2025 by Rachel Moller, the success rate has remained unchanged, while the non-success rate has decreased by 1%. Enrollment has increased much more than campus average. Student success has also increased across all demographics on campus. Females have a slightly lower success rate than males, and there is increasing student success on campus for women in science, including the Women in STEM club to help build community and support to reach more females.

XVII - ATTACH FILES

Optional: If there is any additional information regarding your program that you would like to have uploaded, please attach it here.