

# Instructional Program Review Template

## What is an Instructional Program?

*An Instructional Program or program of study is comprised of selected courses that lead to a degree or certificate. We have several types of instructional programs—the Associate of Arts (AA) degree, the Associate of Science (AS) degree, the Associate of Arts Transfer degree (AA-T), the Associate of Science Transfer degree (AS-T), and the Certificate.*

*All Instructional Programs are situated within a specific Guided Pathway that consists of a community of related disciplines. For example, the Biology AS-T is part of the STEM Pathway, which includes the disciplines of Science, Technology, Engineering, and Mathematics.*

## Program Name

Indicate the type of program here:  AA;  AS;  AA-T;  AS-T;  Certificate

Program Name: Chemistry, Associate Degree for Transfer

Academic Year: 2023-2024

Name of Faculty Submitter(s): Dr. Christopher Nalbandian, Dr. Ashley Vizenor

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## I. Program Description

*The purpose of this section is to provide the reader and/or reviewer with a brief snapshot of the program. This section should be kept short, a few paragraphs at the most, and address the following:*

- A. What is the program mission and how does it support the institutional mission?  
The mission of the chemistry ADT (associate degree for transfer) program is to prepare students for a terminal associate degree in chemistry and/or to continue pursuing a bachelor's degree at the 4-year university level. This program is for the student who chooses to major in chemistry and/or other physical or life sciences such as physics, geology, and biology. This program is built on the foundational courses required for science specific degrees. The chemistry program allows students to pursue critical thinking skills and analytical inquiry in their course work and lab courses. Students engage in professional development during their time in this program highlighted by team work and project collaborations during assignments presented in this program. Students that continue with this program will overcome challenges and grow in confidence in understanding what it means to succeed.
- B. What is the program vision and how does it support the institutional vision?  
The program vision is to prepare students to succeed in their next step whether their goal is a terminal chemistry ADT degree and to enter the workforce, or to transfer to a 4-year university to complete a bachelor's degree in chemistry or a related field. The program will prepare students to have information competency and have sound reasoning skills associated with qualitative and quantitative reasoning. Students will be working in a diverse setting allowing students to gain valuable experiences with from students with different types perspectives and backgrounds.

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C. Please provide a short program description:

The chemistry degree program is a single degree pathway that will cover the foundational undergraduate courses required for a AD-T degree in chemistry. This program will prepare students to continue at the 4-year university to earn a bachelor's degree.

D. How does your program align to and/or support one or more of the following BCC Strategic Priorities?

The 4 PLOs of the program listed below support the 4 strategic priorities shown below. Students will build community during this program as they move through this program together and collaborate during course work and assignments. Building community will lead to innovation and discussion of new ideas. This program will allow students of different backgrounds to come together and lead the way in achieving sustainable excellence in their education and pursuits outside of the classroom.

PLO 1: Students will know the general principles of chemistry. They will be able to compare and contrast physical and chemical reactivity from molecular structure. They will be able to perform standard stoichiometric, solution, kinetic and thermodynamic calculations

PLO 2:

Students will know the common reactions of elements and compounds. They will know the common methods of functional group interconversions.

PLO 3:

Students will practice and demonstrate accurate quantitative measurements, analyze and interpret experimental results, and draw reasonable conclusions.

PLO 4:

Students will perform chemical reactions, followed by separation, purification, and identification using modern chemical and spectroscopic analysis.

- Innovate to Achievable Equitable Student Success
- Ignite a Culture of Learning and Innovation
- Build Community
- Achieve Sustainable Excellence in all Operations

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## II. Program Effectiveness

*The purpose of this section is to evaluate the program holistically by reviewing and analyzing data in the areas of Students, Courses, Program, and Faculty.*

*For each item below, review the data provided. As you examine the data, be on the lookout for trends and outliers while also considering how the data connects to fostering student success, helping students reach their goals, and furthering the mission of BCC.*

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*Provide a short analysis (2-3 sentences) for each item. If data are not available (i.e., student satisfaction surveys), please indicate that on the form.*

## Course Data and Analysis

### A. Course Success Rate by

- Mode of instruction
- Scheduling
- Faculty Status (PT vs FT)

Success rates slightly decreased from 2020-2021 year to 21-22, but then increased from 21-22 to 22-23 for all ethnicities except white (slight increase in 21-22 then decrease 22-23) and Pacific Islander (100% for all years), with an overall average success rate of 86.6% for the past 3 years. Both full time and part-time instructors had a sharp increase in course success rates for these past 3 years. All courses are currently offered online or hybrid, and thus do not have face-to-face data. Hybrid data is only available for limited offerings in the 22-23 year.

### B. Retention Rate by

- Mode of instruction
- Scheduling
- Faculty Status (PT vs FT)

Retention rates have increased overall for most ethnicities, with an overall retention rate of 95.3% as of the 22-23 year. Asian/Filipino and White students have slightly decreased, but are still above the average rate of retention. Part-time and full-time faculty have seen the most drastic increase in retention for Black/African-American and Two or More ethnicities. All course data is for online and/or hybrid instruction only. Hybrid data is only available for limited offerings in the 22-23 year.

### C. Section Count by

- Mode of instruction
- Schedule
- Faculty Status (PT vs FT)

The sections by count for the chemistry associate for transfer degree have increased over the last 3 years from 9 in 20-21 to 16 in 21-22 and 24 in 22-23 all in the online mode of instruction. In 22-23 there was one section offered in the hybrid/ITV/Web Conferencing mode bringing the grand total to 25 for the 22-23 year. The time of day for the 1 section was afternoon while the remaining sections were online sections.

### D. Enrollment Count by

- Mode of instruction
- Schedule
- Faculty Status (PT vs FT)

All courses were taught online or hybrid, with hybrid only being taught for 1 math course during the 22-23 year, with an enrollment grand total of 1,205 (by instructional method). Enrollment greatly increased each year and for both full-time and part-time faculty.

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## E. Class Size Average by

- Mode of instruction
- Schedule
- Faculty Status (PT vs FT)

The class averages for the 20-21, 21-22, and 22-23, years were 21.33, 22.25. and 26.88 respectively. The one Hybrid/ITV/Web Conference section had an average of 12 students. The mode of instruction was primarily online.

## F. Efficiency: WSCH, FTES, FTEF

Efficiency is below the targets for WSCH/FTEF and FTES/FTEF, but this is due to the constraints on enrollment for STEM courses.

## Student Equity Course Data

- A. What equitable practices are being performed by most or all courses within the program (ACCJC Standard 2.2, 2.6, 2.7, 2.8, 2.9)? Please review the following equitable practices and check all that apply.

- |   |   |   |
|---|---|---|
| <input checked="" type="checkbox"/> Multiple options for knowledge acquisition  | <input checked="" type="checkbox"/> Presentation of resources from campus departments | <input checked="" type="checkbox"/> Creates space for students to ask for help                                |
| <input checked="" type="checkbox"/> OER materials   | <input checked="" type="checkbox"/> ADA compliant materials                           | <input checked="" type="checkbox"/> Utilizes learning pact  |
| <input checked="" type="checkbox"/> Use of Early Alert  | <input checked="" type="checkbox"/> Use of graphic organizers                         | <input checked="" type="checkbox"/> Includes resources in syllabus  |
| <input checked="" type="checkbox"/> Audio files as video alternatives   | <input checked="" type="checkbox"/> Promotes peer community building and support      | <input checked="" type="checkbox"/> Provide reminders to students throughout course about resources available |
| <input checked="" type="checkbox"/> Provides students an opportunity for feedback on instruction                                  | <input checked="" type="checkbox"/> Seeks multiple perspectives                       | <input checked="" type="checkbox"/> Collaborative note-taking   |
| <input checked="" type="checkbox"/> Ensures all student races and backgrounds are represented in the classroom and the curriculum | <input checked="" type="checkbox"/> Correlates learning with real-life experience     | <input type="checkbox"/> Other:   |
|   | <input checked="" type="checkbox"/> Probing and clarifying techniques                 | Click or tap here to enter text.  |

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- B. Specifically discuss any equity gaps that have surfaced in the data.  
While most of our chemistry courses utilize OER, there are a couple in which proper OER texts are still emerging (CHEM 1A, CHEM 1B, CHEM 3A, CHEM 3B). This can make it difficult for some students to afford textbooks. We are also currently utilizing lab kits for experiments. These kits are expensive and the school cannot be expected to continuously fund these.
- C. What innovative plans or projects will help to close these gaps?  
As more faculty throughout the California Community College system embrace OER and provide quality resources that compete with published materials faculty will then be able to adopt OER materials. This will continue to close equity gaps for those that are limited by expensive textbooks and materials required in traditional courses.

### Curriculum

- A. Have all program courses been peer reviewed within the last 5 years (ACCJC Standard 2.2, 2.3)?  
If no, please name the course and when it is scheduled for peer review.  
 Yes  No
- B. Have all courses been taught at least once within a two-year time frame? If no, please list the course(s) that has/have not been taught within the last two academic years and why (ACCJC Standard 2.5).  
 Yes  No  
Click or tap here to enter text.
- C. Have there been any changes to the curriculum (courses or program) since the last full program review? What changes and why?  
This is the first full program review for the Chemistry AD-T.
- D. If you feel there are any relevant curriculum details not covered in the above three questions, please list them here (optional).

Offering our chemistry classes as distance and/or Hyflex is critical for student success and retention. The students still perform the exact same experiments as they do in person. The only difference is the experiments are performed at their own home and/or alternate location. This allows for greater flexibility for students to complete their chemistry pre-requisites, while still completing the hands-on requirements specified in C-ID. Our current lab space and available materials are not sufficient for fully face-to-face labs without the use of lab kits. We do not have a proper laboratory manager/director with proper safety training, nor do we possess modern-enough instrumentation for more advanced experiments.

### Program Learning Outcome Assessment Data (Standard 2.9, 4.3)

*Use the section and questions below to summarize findings, trends, and future action for the PLO assessment data.*

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Program Learning Outcomes	Assessment Results – Summary of Data	Please list any future plans based on results
<p>A. Students will know the general principles of chemistry. They will be able to compare and contrast physical and chemical reactivity from molecular structure. They will be able to perform standard stoichiometric, solution, kinetic and thermodynamic calculations</p>	<p>The PLO data for PLO 1 is skewed from the lack of data in the spring 2023. The student pool for Hispanic, White, and Asian were 6,5,6 respectively in Spring 2023 vs 107, 51, and 23 in Fall 2022.</p> <p>The percent that meets or exceeds dropped from 95.3% to 83.8% in Hispanic, 98.0% to 60.0% in Whites, and 78.3% to 33.3% in Asians. This drop was seen from Fall 2022 to Spring 2023 and is not reliable because of the significant decrease in the students being assessed.</p>	<p>The future plans of this PLO will be to make sure more students are assessed to give an accurate comparison for success rates.</p>
<p>B. Students will know the common reactions of elements and compounds. They will know the common methods of functional group interconversions.</p>	<p>The PLO data for PLO 2 is slightly skewed from the lack of data in the spring 2023. The student pool for Hispanic, White, and Asian were 18, 18, 15 respectively in Spring 2023 vs 36, 12, 32, in Fall 2022.</p> <p>The percent that meets or exceeds increased from 77.8% to 83.8% in Hispanic, decreased from 66.7% to 60.0% in Whites, and decreased from 75.0% to 33.3% in Asians. This drop was seen from Fall 2022 to Spring 2023 and is not consistently reliable because of the differences in students being assessed.</p>	<p>The future plans of this PLO will be to make sure more students are assessed to give an accurate comparison for success rates.</p>
<p>Students will practice and demonstrate accurate quantitative measurements, analyze and interpret experimental results, and draw reasonable conclusions. Students will practice and demonstrate</p>	<p>The PLO data for PLO 3 is skewed from the lack of data in the Spring 2023. The student pool for Hispanic, White, and Asian were 6,5,6 respectively in Spring 2023 vs 107, 51, and 23 in Fall 2022.</p> <p>The percent that meets or exceeds dropped from 95.3% to 83.8% in Hispanic, 98.0% to</p>	<p>The future plans of this PLO will be to make sure more students are assessed to give an accurate comparison for success rates.</p>

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<p>accurate quantitative measurements, analyze and interpret experimental results, and draw reasonable conclusions.</p> <p>C.</p>	<p>60.0% in Whites, and 78.3% to 33.3% in Asians. This drop was seen from Fall 2022 to Spring 2023 and is not reliable because of the significant decrease in the students being assessed.</p>	
<p>Students will perform chemical reactions, followed by separation, purification, and identification using modern chemical and spectroscopic analysis. Students will perform chemical reactions, followed by separation, purification, and identification using modern chemical and spectroscopic analysis.</p> <p>D.</p>	<p>The PLO data for PLO 4 is skewed from the lack of data in the Spring 2023. The student pool for Hispanic, White, and Asian were 4,4,6 respectively in Spring 2023 vs 74, 35, and 18 in Fall 2022.</p> <p>The percent that meets or exceeds dropped from 94.6% to 83.3% in Hispanic, 97.1% to 60.0% in Whites, and 77.8% to 33.3% in Asians. This drop was seen from Fall 2022 to Spring 2023 and is not reliable because of the significant decrease in the students being assessed.</p>	<p>The future plans of this PLO will be to make sure more students are assessed to give an accurate comparison for success rates.</p>
<p>E. Click or tap here to enter text.</p>	<p>Click or tap here to enter text.</p>	<p>Click or tap here to enter text.</p>

A. Since the previous program review, what changes or actions, if any, have been taken to improve outcomes?

N/A

B. Please reflect on the PLO data above and discuss any possible strengths the program has based on the data.

More students need to be assessed to draw any conclusions for areas of focus and improvement.

The strengths of the program are that many students are succeeding in the program. The data does show that when a larger number of students are in the program student success is apparent.

C. Please reflect on the PLO data above and identify areas for student-centered growth or improvement.

- Are there specific courses/SLOs that the program would like to focus on for growth and improvement?

More students need to be assessed to draw any conclusions for areas of focus and improvement.

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- What actions can help grow or improve these areas moving forward?

More students need to be assessed to draw any conclusions for areas of focus and improvement.

D. Please reflect on assessment data trends based on ethnicity, race, and gender.

- What actions can the program take to support equitable outcomes?

More students need to be assessed to draw any conclusions for areas of focus and improvement.

- Are there specific student groups the program would like to focus their efforts on?

More students need to be assessed to draw any conclusions for areas of focus and improvement.

## Program Data and Analysis

### A. Demographics

The majority of declared majors are White and Hispanic. More than half of the declared majors are female. Most students are between 20 and 24 years of age

### B. Award Count

22-23 was the first year in which the Chemistry AD-T was awarded. There were 3 degrees awarded. Of those, 1 was Asian/Filipino, 1 was Hispanic, and 1 was Two or More ethnicities.

### C. Student Equity Program Data

- Specifically discuss any equity gaps that have surfaced in the data.

Because only 3 degrees have been awarded to date, equity gaps are unable to be assessed.

- What innovative plans or projects will help to close these gaps?

Continue to use OER and encourage students to attend office hours and ask questions.

### D. Student or Program Satisfaction Survey Results

N/A

### E. CTE-specific data

- CTE Advisory Boards
- Labor Market data
- Program Viability

Click or tap here to enter text.

### F. Comparative data (compared to BCC and/or compared to other programs)

Currently, there are no comparisons



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## G. Institution-Set Standards and the Big Picture

*This section provides an opportunity to tie in all the data about the program to tell the story behind the numbers. Be sure to consider what an outsider to your program or career technical field may not know about current trends or changes.*

1. How is your program doing overall based on observation of program data?

Overall, the program is thriving. We are seeing a huge increase in enrollment and declared majors. We also have high enrollment in underrepresented groups such as women and PoC.

2. Provide an analysis of the “big picture” by reflecting on how your program data compares to the Institution-set Standards below.

86.6% average course success rate. This is much higher than the institution-set and stretch goal standards.

	Institution Set (Floor)	Stretch Goal (Aspirational)	Program Data
Course Completion Rates	<b>74%</b>	<b>76%</b>	
Certificates	<b>81</b>	<b>97</b>	
Degrees	<b>437</b>	<b>524</b>	
Transfers	<b>213</b>	<b>287</b>	
*Licensure Exam Pass Rates	<b>70%</b>	<b>79%</b>	
*Employment Rates	<b>60%</b>	<b>73%</b>	

*\*Applicable to CTE*

## Guided Pathways and Response

A. Name of the Guided Pathway that your program is a part of

Science, Technology, Engineering and Math

B. List the other programs (clusters) that are part of your Guided Pathway

Biology, Math, Computer Science, Kinesiology, Environmental Science

C. Provide a summary of how your program collaborates with other programs (clusters) in your Pathway.

*Examples of collaboration: meetings, projects, conferences, other cross-disciplinary professional development, etc.*

Faculty in STEM disciplines have attended conferences together while pursuing professional development.

## Faculty/ Program Staff Data and Analysis

A. **Faculty Load (FTEF)**

FTEF has increased over time for overload and part-time load, and decreased for full-time load.

B. **FT/PT/OL Faculty Ratio**

FT/PT/OL ratio has increased for PT and OL, and initially increased for FT, followed by a decrease for the 22-23 year.

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## C. Faculty Professional Development

1. Please list any professional development that faculty members have participated in (Standard 3.2)  
SEPI, S-STEM, faculty leadership, BCFA, CCA conferences. Faculty have attended equity conferences and continue to search for beneficial professional development opportunities
2. Please list any professional development that faculty members would benefit from (Standard 3.2)  
STEM educator conferences and training, ACS conference attendance. Training for online STEM education would be very beneficial as our enrollment has been heavily tied to online coursework.
3. Does the program have sufficient staffing and support? Please discuss. (Standard 2.7)  
No. To begin, we need a properly educated and trained laboratory manager who can prepare and maintain our lab space. Due to safety concerns, all of the chemicals in the lab were disposed of, so we do not have any chemicals or proper storage cabinets for them. In addition, we would benefit from more faculty. Ideally, one more full-time Chemistry instructor would benefit us and reduce the unit load of Drs Nalbandian and Vizenor. We are also in need of a full-time physics instructor as this course is crucial to the Chemistry and Biology AD-Ts.

## D. Overall Observation of Data on Faculty

*This section provides an opportunity to tie in all the data about faculty to tell the story behind the numbers. Be sure to consider what an outsider to your program or career technical field may not know about current trends or changes.*

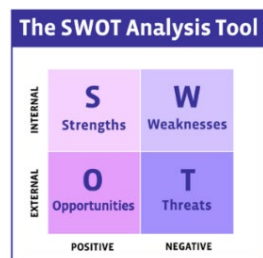
Provide an analysis of the “big picture.”

Chemistry AD-T is a strong and important degree program at BCC. The faculty have high success rates and are maintaining a strong program that is drawing in students from all over the state of California. The flexibility of distance learning has greatly increased the accessibility of STEM, especially chemistry. However, for face-to-face labs, we are grossly underprepared. We lack the proper materials, instrumentation, space, and staffing to properly provide adequate laboratory instruction.

## SWOT Analysis

*Conducting a SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats) is another tool that can help areas evaluate themselves. The SWOT Analysis not only looks internally, but externally as well.*

*The SWOT Analysis provides a way for areas to highlight their accomplishments and also identify possible gaps or issues that need to be addressed.*



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	Positive/ Helpful	Negative/ Harmful
<b>Internal</b>	<p><b>STRENGTHS</b></p> <ol style="list-style-type: none"> <li>1. Accredited institution: Barstow Community College is an accredited institution, which enhances our credibility and assures the quality of education provided.</li> <li>2. Open access: The college provides open access to education, allowing a diverse range of students to enroll and benefit from its programs.</li> <li>3. Traditional and online education options: Our program offers both traditional and online education courses, providing flexibility and accessibility to students.</li> <li>4. Focus on student success: Our program is committed to enhancing student success through its programs and pathways, ensuring students achieve their personal goals.</li> <li>5. Transfer opportunities: Our program offers pathways designed to prepare students to transfer to a 4-year university to complete their bachelors' degrees and further their success.</li> </ol>	<p><b>WEAKNESSES</b></p> <ol style="list-style-type: none"> <li>1. Availability of resources. We do not have enough space for maintain the demand for our courses. In addition, if fully face-to-face labs are going to be enforced, we do not have the materials or space for proper instrumentation that is required for experience.</li> </ol>
<b>External</b>	<p><b>OPPORTUNITIES</b></p> <ol style="list-style-type: none"> <li>1. Research and collaboration with local colleges.</li> <li>2. Additional degree opportunities: Many students are only 2-3 classes away from completing a second associates degree. This also allows students to complete more lower</li> </ol>	<p><b>THREATS</b></p> <ol style="list-style-type: none"> <li>1. Competition from other institutions: Barstow Community College may face competition from other institutions offering similar programs.</li> <li>2. 3. Limited resources: The college may face challenges in terms of limited resources, such</li> </ol>

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	division course requirements for their bachelor degrees.	as funding and infrastructure, to meet the growing demands and expectations of students.
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### III. Program Goals, Objectives, and Outcomes

The purpose of this section is to use data to develop goals and objectives for the next three years. Reflect on the responses to all the previous questions and the SWOT analysis in Section Two.

As you develop goals and objectives,

- Formulate **two to three Program Goals** to maintain or enhance program strengths, or to address identified weaknesses (cite evidence from assessment data and/or other student achievement data, course, faculty, etc).
- indicate the **status** of the Program Goal (ex: is the goal new, a carry-over from the previous program review cycle, etc.)
- Indicate how each Goal is **aligned** with the College's [Strategic Priorities](#).
- Indicate how each goal is **aligned** with the [Pillars of Guided Pathways](#).
- List at least one **objective** for reaching each goal.
- Develop an **outcome** statement for each objective.
- Explain how you will **measure** the outcome.
- List any **resources** that will be needed to achieve the goal.

#### GOAL #1

Develop a comprehensive online learning framework for students that offers full degree and certificate programs, that integrates up-to-date technology resources, and that in addition provides flexible, robust online support for faculty.

A. This Goal is

- New
- Continued
- Modified

*If modified please list how and why.*

Click or tap here to enter text.

B. Alignment to BCC Strategic Priority (Select at least one but also choose all that apply – click Choose an item for the drop-down list to appear)

Strategic Priority 1: Innovate to Achieve Equitable Student Success

Strategic Priority 2: Ignite a Culture of Learning and Innovation

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Strategic Priority 3: Build Community

Strategic Priority 4: Achieve Sustainable Excellence in all Operations

## C. Relationship to Guided Pathways

- Clarify the Path
- Entering the Path
- Staying on the Path
- Support Learning

## D. Please list objective(s) for achieving this goal.

1. Design and implement Full Degree and Certificate Programs online
2. Integrate Current Technology Resources
3. Comprehensive online support for faculty.
4. Foster a sense of community in the chemistry pathway.

## E. Please list outcome statements for each objective.

### A. Design and implement Full Degree and Certificate Programs Online

1. Develop a curriculum structure for the pre-allied health pathway that is optimized for online delivery.
2. Create detailed course outlines, learning objectives, and assessment strategies for each course in the pathway
3. Develop a combination of online lab simulations and hands-on lab experiences students can complete during distance learning with instructor guidance and feedback.
4. Collaborate with subject-matter experts and other experts to ensure articulation of the content and that it is accurate, relevant and engaging.

### B. Integrate Current Technology Resources.

1. Identify and implement cutting-edge educational technologies to enhance online learning experiences.
2. Ensure compatibility and accessibility of programs used.
3. Provide training and resources for faculty to effectively utilize chosen technologies.

### C. Comprehensive Online Support for Faculty

1. Develop a repository of online teaching resources (best practice, pedagogical guidelines, troubleshooting...)
2. Implement regular training sessions and workshops to empower faculty with online teaching skills.

### D. Community Building within the Pre-Allied Health Pathway.

1. Facilitate regular communication channels for students and faculty in the pre-allied health pathways.
2. Participate in and/or organize virtual events, webinars, and discussion forums centered around allied health topics.

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F. Briefly explain how you will measure the outcome.

1. Increase in the number of pre-allied health students successfully completing their degree or certificate programs
2. Higher levels of student engagement and satisfaction in online courses, as measured by surveys and student feedback.
3. Increased utilization of online support resources by faculty
4. Positive trends in faculty participation in continuous professional development opportunities.
5. Improvement in the retention rates of pre-allied health students.

G. Please list resources (if any) that will be needed to achieve the goal.

A. Financial resources

1. Budget for the acquisition of technology, software licenses, and instructional development
2. Funding for faculty training, development and stipends for content creation

B. Training resources

1. Continued support of instructional designers and other educational technologists to collaborate with faculty on course design and the integration of technology.
2. Trainers and facilitators to conduct professional development workshops
3. Continued technical support staff to assist with troubleshooting and other issues.

C. Technology resources

1. Continued support and funding for educational software and tools to provide interactive learning experiences for our students.

D. Content Development Resources

1. Access to subject-matter experts and lab creation experts for distance/online learning to create accurate and relative course content and hands on lab experiences for students.
2. Multimedia development tools for creating engaging learning materials

E. Administrative Support

1. Continued administrative support for scheduling training sessions and managing resources

F. Assessment and measurement tools

1. Surveys, feedback forms and other analytical tools to measure student and faculty satisfaction, engagement and program effectiveness.

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## GOAL #2

Hire a lab coordinator to facilitate on-campus laboratory sections.

B. This Goal is

- New
- Continued
- Modified

*If modified please list how and why.*

Click or tap here to enter text.

C. Alignment to BCC Strategic Priority (*Select at least one but also choose all that apply – click Choose an item for the drop-down list to appear*)

Choose an item.

Strategic Priority 1: Innovate to Achieve Equitable Student Success

Strategic Priority 2: Ignite a Culture of Learning and Innovation

Strategic Priority 4: Achieve Sustainable Excellence in all Operations

D. Relationship to Guided Pathways

- Clarify the Path
- Entering the Path
- Staying on the Path
- Support Learning

H. Please list objective(s) for achieving this goal.

1. Job description designed and approved.
2. Job position open for recruiting.
3. Interviews
4. Hire and start by Spring, 2024

I. Please list outcome statements for each objective.

1. The job description is accurately and comprehensively designed, reviewed, and approved by

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all relevant stakeholders, ensuring that it effectively communicates the key responsibilities, qualifications, and expectations for the position.

2. The job position is accurately opened for recruiting.

3. Candidates are successfully vetted and reviewed by a committee of stakeholders as outlined by AP 7120 for hiring and interviews are successfully conducted.

4. Board approval will be sought by December, 2023.

J. Briefly explain how you will measure the outcome.

We will measure this by having a qualified lab coordinator starting.

K. Please list resources (if any) that will be needed to achieve the goal.

Click or tap here to enter text.

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## GOAL #3

Hire one full-time chemistry faculty member

C. This Goal is

New

Continued

Modified

*If modified please list how and why.*

Click or tap here to enter text.

D. Alignment to BCC Strategic Priority (*Select at least one but also choose all that apply – click Choose an item for the drop-down list to appear*)

Strategic Priority 1: Innovate to Achieve Equitable Student Success

Strategic Priority 2: Ignite a Culture of Learning and Innovation

Strategic Priority 3: Build Community

Strategic Priority 4: Achieve Sustainable Excellence in all Operations

E. Relationship to Guided Pathways

Clarify the Path



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- Entering the Path
- Staying on the Path
- Support Learning

L. Please list objective(s) for achieving this goal.

1. Job description designed and approved.
2. Job position open for recruiting.
3. Interviews
4. Hire and start by Fall, 2024

M. Please list outcome statements for each objective.

1. The job description is accurately and comprehensively designed, reviewed, and approved by all relevant stakeholders, ensuring that it effectively communicates the key responsibilities, qualifications, and expectations for the position.
2. The job position is accurately opened for recruiting.
3. Candidates are successfully vetted and reviewed by a committee of stakeholders as outlined by AP 7120 for hiring and interviews are successfully conducted.
4. Board approval will be sought by August, 2024.

N. Briefly explain how you will measure the outcome.

We will measure this by having a qualified chemistry professor who focuses on teaching general and/or organic chemistry

O. Please list resources (if any) that will be needed to achieve the goal.

Personell (faculty)

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## Previous Goals/Outcomes

Were any outcomes discontinued or completed? Please speak to outcomes you are not carrying forward from the previous program review cycle and discuss why.

2 SLOs from CHEM 3B have been eliminated due to there being too many SLOs for the course.

# Instructional Program Review Template

## Instructional Program Review Template

### IV. Resource Requests:

*What resources are needed for the program to meet its goals and objectives? Resource requests should be evidence-based and tied to goals and objectives stated above.*

*Resources may be requested from the following categories:*

- *Personnel/Staffing*
- *Technology Resource*
- *Facilities Resource*
- *Professional Development*
- *Other*

*For all resource requests programs should utilize the Budget Allocation Proposal form and submit with their program review. If needed, the Out-of-Cycle BAP form may be submitted for resource requests when completing an Annual Update in Years 2 and 3.*

Goal #	Objective #	Resource Required	Estimated Cost	BAP Required? Yes or No	In No, indicate funding source
1	1, 2, 3	Laboratory Equipment	\$250,000	Yes	Click or tap here to enter text.
1	1, 2, 3	Laboratory Chemicals	\$20,000	Yes	Click or tap here to enter text.
1	1, 2, 3	Lab Kits	\$200,000	Click or tap here to enter text.	Click or tap here to enter text.
2	1, 2, 3, 4	Hire Laboratory Manager/Director	\$100,000	Click or tap here to enter text.	Click or tap here to enter text.
3	1, 2, 3, 4	Hire full-time chemistry faculty	\$100,000	Click or tap here to enter text.	Click or tap here to enter text.