Instructional Program Review- Annual Update Template

Instructional Program

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

Program Name: Biology

Academic Year: 2024-25

Name of Faculty Submitter(s): Dr. Beverly Ranney

Annual Update #1 ☒ #2 ☐

Note: An Annual Update must be submitted each year that a Program Review is not submitted.

I. Progress on Program Level Outcomes (PLOs) and Student Learning Outcomes (SLOs) Data

A) Summarize the progress made on course level outcomes and assessments (SLOs):
Progress has plateaued due to changes in modality for courses. While success and retention rates remain high, the program has seen a loss of over one hundred students in the last year.

B) Please list specific courses or SLOs that were identified for student-centered growth and improvement.
Use the information from Part C of the "Program Learning Outcomes Assessment Data" section of the IPR.
BIOL 20A was identified and has not been offered since the full program review was completed.

1) List the actions identified to help grow or improve those areas.
With 80% of students successful, no specific actions were identified beyond "finding ways to support disproportionally impacted students."
2) Discuss the progress the program has made on those actions. Include any data used to support progress.
No progress has been made, as the program has not been teaching all courses within the program. Offering the full range of modalities for the courses would likely be the single most effective strategy to increase the support offered to disproportionally impacted students.

C) Please list any actions identified to support equitable outcomes.
Use the information from Part D of the "Program Learning Outcomes Assessment Data" section in the IPR.
Click or tap here to enter text.

1) List the specific student groups the program identified as students they would like to focus their efforts on.
No specific student groups were identified in the Program Review as needing to focus support efforts on, as all students choosing STEM belong in STEM and deserve support.

2) Discuss any progress with equitable action within the program and any measures taken to ensure the identified student group(s) would receive appropriate support. Include any data used to support progress.
No equitable action within the program have been taken.

D) Describe any other program, course, and/or instructional changes made by your program as a result of the outcomes assessment process.
No changes were made based on the OA process.

E) Reflecting on the responses for B) and C) above, what will you implement for the next assessment cycle?
None

II. Progress Toward Achieving Program Goals, Objectives, and Outcomes

These should be carried forward from your full Program Review (Section III), or from your Annual Update #1, if revised since your full Program Review.

A) List the 2-3 goals from your Program Review or most recent update.

1. **GOAL #1**
   Identify funding for lab kits for biology program courses.

2. **GOAL #2**
   Increase by 10% over the next three years the success rates of disproportionally impacted student groups

3. **GOAL #3**
   Click or tap here to enter text.

B) Have any goals been completed or discontinued?

If yes, please list the goal and whether it has been completed or discontinued; if discontinued, please explain why.

Yes ☒ No ☐

Goal 1 has been discontinued because the District has chosen to elimate online options for STEM classes.

C) Discuss the objectives and related outcomes for each goal.

1. **GOAL #1 Objective(s) with related Outcome.**
   Click or tap here to enter text.

   - **Discuss any progress toward meeting the goal based on the goal objectives.**
     Click or tap here to enter text.

- **Briefly explain how you have been measuring the goal and any notable indicators of forward progress.**
  Click or tap here to enter text.

2. **GOAL #2 Objectives with related Outcome.**
   Increase by 10% over the next three years the success rates of disproportionally impacted student groups.

   1. Attend professional development trainings, workshops, and conferences.

   2. Seek opportunities to develop/write/test out culturally relevant assignments, lectures, guest speakers, and texts.

   3. Hire a tenure-track physics instructor

- **Discuss any progress toward meeting the goal based on the goal objectives.**
  A tenure-track physics instructor has been hired.

- **Briefly explain how you have been measuring the goal and any notable indicators of forward progress.**
  The successful completion of the hiring process.

3. **GOAL #3 Objectives with related Outcome.**
   Click or tap here to enter text.

- **Discuss any progress toward meeting the goal based on the goal objectives.**
  Click or tap here to enter text.

- **Briefly explain how you have been measuring the goal and any notable indicators of forward progress.**
  Click or tap here to enter text.

D) List any resource you are requesting for each goal.

1. Goal 1 ☐ Goal 2 ☒ Goal 3 ☐

   Please list the resource and how it relates to the goal.
   Professional development monies; monies needed to attend professional development trainingings, workshops, and conferences specific to STEM to increase student success, especially the success of disproportionally impacted student populations.

2. Goal 1 ☐ Goal 2 ☐ Goal 3 ☐

   Please list the resource and how it relates to the goal.
   Click or tap here to enter text.

3. Goal 1 ☐ Goal 2 ☐ Goal 3 ☐

Please list the resource and how it relates to the goal.

Click or tap here to enter text.

III. New Goals (optional)

This section is optional and should be used to replace a completed or discontinued goal OR if a new goal has become necessary for the program.

A. NEW GOAL #1

Click or tap here to enter text.

1. Alignment to BCC Strategic Priority *(Select at least one but choose all that apply)*

Choose an item.

Choose an item.

Choose an item.

Choose an item.

2. Relationship to Guided Pathways

☐ Clarify the Path

☐ Entering the Path

☐ Staying on the Path

☐ Support Learning

3. Please list at least one objective for achieving this goal.
   Click or tap here to enter text.

4. Please list outcome statements for each objective.
   Click or tap here to enter text.

5. Briefly explain how you will measure the outcome.
   Click or tap here to enter text.

6. Please list resources (if any) that will be needed to achieve the goal/outcome.
   Click or tap here to enter text.

B. NEW GOAL #1

Click or tap here to enter text.

1. Alignment to BCC Strategic Priority *(Select at least one but choose all that apply)*

Choose an item.

Choose an item.

Choose an item.

Choose an item.

2. Relationship to Guided Pathways

☐ Clarify the Path

☐ Entering the Path

☐ Staying on the Path

☐ Support Learning

3. Please list at least one objective for achieving this goal.
   Click or tap here to enter text.

4. Please list outcome statements for each objective.
   Click or tap here to enter text.

5. Briefly explain how you will measure the outcome.
   Click or tap here to enter text.

6. Please list resources (if any) that will be needed to achieve the goal/outcome.
   Click or tap here to enter text.

IV. Resource Requests: What does the program need to meet its goals and objectives?

What does the program need to meet its goals and objectives?

List all resources from Sections II.D and III.6 below.

If there was no room on the template to list all resources being requested for a single goal/objective, you may list additional resource requests here. Also list any resources required to implement planned improvements.

Instructional Program Review- Annual Update Template

IMPORTANT: A BUDGET ALLOCATION PROPOSAL must be completed and submitted for **EACH** new resource requested.

Goal #	Objective #	Resource Required	Estimated Cost	BAP Required? Yes or No	In No, indicate funding source
2	1	Professional development conference attendance funds	$3,000 per faculty	Yes	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.

BUDGET ALLOCATION PROPOSAL – OUT OF CYCLE

Date: 12/4/2024 Originator: Science Faculty

Program or Department Name: Biology AD-T: BIOL 20B

Dean/Vice President/Supervisor: Emily Garrison

What are you requesting? *(Brief)* Equipment for BIOL 20B

Amount Requested: $25,000 ☒ One-time Funding ☐ Ongoing Funding

Funding Source (if known) :

REQUEST TYPE:

☐ Personnel/Staffing	☐ Technology Resource	☐ Facilities Resource	☒ OTHER
*Complete **Personnel/Staffing** section below*	*Complete **Technology** section below*	*Complete **Facilities** section below*	

PERSONNEL/STAFFING REQUEST

Is the position request for: ☐ Faculty ☐ Classified ☐ Management/Confidential

Is the position requested: ☐ A new classification (Attach *proposed* job description, or *detailed* list of proposed duties)

☐ An existing classification *Official Job Title:*

Is the position requested: ☐ Full Time ☐ Part Time: _____ Months/Year _____ Hours/Week

TECHNOLOGY RESOURCE REQUEST

Indicate the category of the request:

☐ Hardware ☐ Software ☐ Printer/Copier ☐ Network ☐ Audio-Visual ☐ License/Maintenance

Indicate the intended users: ☐ Students ☐ Faculty ☐ Staff ☐ Other

Is training required? ☐ No ☐ Yes Explain:

How will it be secured? ☐ Alarm ☐ Secure Room ☐ Secure Cabinet ☐ Cable/Lock ☐ Password

Have you completed and attached the Technology Assessment Form?

FACILITIES RESOURCE REQUEST

Indicate the intended users: ☐ Students ☐ Faculty ☐ Staff ☐ Other

Is maintenance required? ☐ No ☐ Yes Explain:

1. Why is the request being made?

Supplying the necessary equipment to successfully deliver BIOL 20B to students is essential to maintaining our commitment to student success, meeting transfer requirements, and fulfilling our institutional mission of providing equitable access to high-quality education. The request is being made for foundational equipment that the College has not previously invested in to teach ecology and evolution. The College has invested considerable resources to ensure that we have a biology program that satisfy the COR requirements of multiple classes and meets the needs of our biology students; this is the final class in outfitting the biology program. We anticipate growing enrollment in biology classes as the College continues to grow in-person enrollment in tandem with growth of our community due to the BIG project. This request supports needed equipment and supplies for 20B, with one section of the class offered annually. It is feasible that as the community grows, demand for this program will require multiple sections of this course each semester.

2. a) What is the urgency for this request being made outside of the Annual Update/Program Review regular cycle?

This request is being made outside of the normal cycle due to shifts in modality for the course. Previously utilizing at-home kits, the course is now offered only in-person and needs equipment to fulfill all experiments on the COR in an on-campus laboratory setting.

b) Explain how the request is supported with information gathered from the assessment of outcomes (Student Learning Outcomes, Program Level Outcomes, Service Area Outcomes, or Administrative Unit Outcomes).

The request for foundational equipment for BIOL 20B is directly tied to the achievement of both student and program learning outcomes. These materials are essential for providing hands-on experiences that allow students to develop technical proficiency, apply scientific methods, and achieve career readiness as outlined in SLOs and PLOs. By ensuring that all students have equitable access to lab resources, the funding supports the assessment and continuous improvement of learning outcomes while advancing institutional goals for critical thinking, lifelong learning, and transfer preparation..

c) How was this included in the Area Goals section of your Program Review? Please cite section/item number and include the text.

As a request for equipment necessary to teach the information on the Course Outline of Records, this request is not aligned with area goals. It is a fundamental need of the biology program. This equipment should last 7-10 years with proper maintenance and use, even if the number of sections per year double or quadruple from current offerings.

3. If this item is approved, what departments or resources are needed, or would be affected, when implementing or developing it, on both a short-term and a long-term basis? Have they been notified?
Example: Technology Assessment Form
(This question is not required for Personnel/Staffing requests.)

N/A

4. a) How will this resource improve student success or institutional services?

Having the foundational equipment for BIOL 20B is essential for fostering student success. This equipment enables hands-on learning, reinforces theoretical concepts, and ensures students develop the technical skills necessary for success at transfer institutions. By providing equitable access to appropriate and relevant equipment in labs, the college ensures that all students, regardless of background, can complete their coursework, build confidence, and achieve academic and professional success. This investment directly supports retention, completion, and transfer readiness, aligning with institutional goals for equitable education and student achievement.

b) What data will you gather and analyze to demonstrate that your proposal is meeting this goal(s)?

Regular access to a functioning laboratory portion of the class ensures students have the tools they need to meet established SLOs and PLOs, improving pass rates and learning outcomes. Assessment data collected from lab can demonstrate how access to these resources correlates with student achievement. By monitoring how students perform in lab, faculty can identify areas for improvement in teaching or resource allocation, leading to better alignment with learning outcomes over time.

5) Describe how your request is aligned with as many of the college's strategic planning documents as applicable. (If the request does not align with a document, indicate N/A.)

Please be specific and provide detail, ensuring a clear correlation between content of referenced document and the request. Cite the section and page numbers where the correlation can be found.

(Follow the links to access each document)

1. Mission Statement

The biology program addresses educational equity by providing historically underrepresented and economically disadvantaged students with access to a pathway leading to stable, high-demand careers in industry, research, and academia. BIOL 20B is a key course in the biology program. Offering a Biology AD-T aligns with the college's mission to support marginalized populations through accessible education. The program caters to Barstow's unique student demographics, including residents, and military-affiliated students. It offers flexible class schedules, hybrid options, and tailored advising to ensure accessibility for working students and those with family or military obligations. The requested allocation supports affordable lab equipment. BIOL 20B provides foundational knowledge in evolution and ecology, showing students how these topics relate to medicine, research, and education. This course is essential for students seeking to enter rigorous programs at 4-year universities. The funding ensures the availability of up-to-date lab equipment, simulations, and other resources that align with industry standards. With a growing demand for professionals both locally and nationally, the biology program directly supports transfer readiness. For Barstow's diverse student body, especially those from low-income backgrounds, this program provides a pathway to careers that offer economic stability and upward mobility, fulfilling the college's commitment to student success.

2. Strategic Priorities / Strategic Goals

The $25,000 budget allocation for the needed equipment for BIOL 20B exemplifies Barstow Community College's commitment to equitable student success and institutional excellence. By providing essential resources, fostering innovative teaching practices, and building community connections, the course equips students with the knowledge and skills needed for successful transfer to 4-year biology programs. It also advances sustainability and operational excellence by incorporating resource-efficient practices and supporting long-term institutional

goals. This investment not only meets immediate educational needs but builds a foundation for a more inclusive, innovative, and connected future.

3. Educational Master Plan

This one-time funding for BIOL 20B demonstrates Barstow Community College's commitment to responsible stewardship by optimizing resource utilization, maintaining program quality, and supporting long-term institutional sustainability. By investing in the biology program, the allocation ensures that students receive a high-quality education at a reasonable cost while maximizing the return on investment for the college and community. This predictable and strategic use of funds supports the college's mission of providing equitable, accessible, and affordable education to its diverse student body.

4. Others: Such as Technology Plan , Facilities Master Plan, HR Staffing Plan, Professional Development Plan

ADMINISTRATIVE USE

Administrator: _____ Title: _____

Comments/Recommendations:

Signature: _____ Date: _____

Administrator: _____ Title: _____

Comments/Recommendations:

Unit Priority Ranking: _____ of _____

BUDGET INFORMATION

*(This section **MUST** be completed)*

Budget Program Number: _____ ☐ Restricted ☐ Unrestricted

Comments regarding Budget Information: _____

Signature: _____ Date: _____

BUDGET ALLOCATION PROPOSAL

Date: 10/1/2024 Originator: Dr. Beverly Ranney

Program or Department Name: Biology AS-T, Academic Affairs

Dean/Vice President/Supervisor: Emily Garrison

What are you requesting? *(Brief)* Funds for faculty to travel to conferences

Amount Requested: $3,000 per faculty ☒ One-time Funding ☐ Ongoing Funding

Funding Source (if known):

REQUEST TYPE:

☐ Personnel/Staffing	☐ Technology Resource	☐ Facilities Resource	☒ Professional Development
*Complete **Personnel/Staffing** section below*	*Complete **Technology** section below*	*Complete **Facilities** section below*	*Complete **Professional Development** section below*
☐ OTHER			

PERSONNEL/STAFFING REQUEST

Is the position request for: ☐ Faculty ☐ Classified ☐ Management/Confidential

Is the position requested: ☐ A new classification (Attach *proposed* job description, or *detailed* list of proposed duties)

☐ An existing classification *Official Job Title:*

Is the position requested: ☐ Full Time ☐ Part Time: _____ Months/Year _____ Hours/Week

TECHNOLOGY RESOURCE REQUEST

Indicate the category of the request:

☐ Hardware ☐ Software ☐ Printer/Copier ☐ Network ☐ Audio-Visual ☐ License/Maintenance

Indicate the intended users: ☐ Students ☐ Faculty ☐ Staff ☐ Other

Is training required? ☐ No ☐ Yes Explain:

How will it be secured? ☐ Alarm ☐ Secure Room ☐ Secure Cabinet ☐ Cable/Lock ☐ Password

Have you completed and attached the Technology Assessment Form?

FACILITIES RESOURCE REQUEST

Indicate the intended users: ☐ Students ☐ Faculty ☐ Staff ☐ Other

Is maintenance required? ☐ No ☐ Yes Explain:

BUDGET ALLOCATION PROPOSAL

PROFESSIONAL DEVELOPMENT REQUEST				
Indicate the intended users:	☐ Students	☒ Faculty	☐ Staff	☐ Other
Do other internal areas/departments need to be involved? ☒ No ☐ Yes Explain:				
Is technology needed? ☒ No ☐ Yes Explain:				

1. Why is the request being made?

   Science faculty are requesting funds to attend conferences in STEM areas (such as the National Association of Biology Teachers and the Association for Biology Laboratory Education) to learn more ways to close equity gaps in our program.

2. a) Where in the Program Review/Annual Update is the request supported? Include the text from the Program Review AND cite the applicable section number(s).

   This request is supported in Goal 2 of the Program Review, which stems from the Program Learning Assessment Data. Currently, over 80% of our students are successful in the program but there may be equity gaps which should be closed. The faculty believe that all students deserve supports that encourage their success in STEM.

   b) Explain how the request is supported with information gathered from the assessment of outcomes (Student Learning Outcomes, Program Level Outcomes, Service Area Outcomes, or Administrative Unit Outcomes).

   The faculty are requesting money to attend STEM conferences. We have 80% success rate in our program but there are equity gaps. We believe that attending professional development will allow us to better identify and close those equity gaps with appropriate pedagogical supports. Professional development opportunities, such as attending STEM conferences, offer valuable insights into the latest research, teaching strategies, and tools aimed at fostering inclusive and equitable learning environments. By engaging with experts and peers from across the STEM education community, faculty can enhance their ability to identify the specific challenges contributing to these gaps. Conferences often highlight evidence-based, culturally responsive pedagogical supports, enabling faculty to bring back actionable strategies tailored to the diverse needs of our student body.

   c) How was this included in the Area Goals section of your Program Review? Please cite section/item number and include the text.

   This was included in Goal 2 in the Program Review. "Increase by 10% over the next three years the success rates of disproportionally impacted student groups."

3. If this item is approved, what departments or resources are needed, or would be affected, when implementing or developing it, on both a short-term and a long-term basis? Have they been notified? Example: Technology Assessment Form
   (This question is not required for Personnel/Staffing requests.)

   No departments would be affected.

4. a) How will this resource improve student success or institutional services?

Attending these conferences will empower our faculty to better serve underrepresented students, refine teaching practices, and develop interventions that will help close these equity gaps, ensuring a more inclusive and successful program for all.

b) What data will you gather and analyze to demonstrate that your proposal is meeting this goal(s)?

We will gather and analyze PSLO and course SLO data to demonstrate our proposal is meeting the goal.

5) Describe how your request is aligned with as many of the college's strategic planning documents as applicable. (If the request does not align with a document, indicate N/A.)

Please be specific and provide detail, ensuring a clear correlation between content of referenced document and the request. Cite the section and page numbers where the correlation can be found.

(Follow the links to access each document)

1. Mission Statement

Attending a STEM conference directly aligns with Barstow Community College's mission to provide equitable, accessible, and high-quality education to its diverse student body. Conferences are a rich source of cutting-edge knowledge and innovative pedagogical strategies that can help faculty create more inclusive and effective learning environments. This aligns with the college's focus on serving historically marginalized populations, including local, military, and distance education students, by equipping instructors with tools to support a wide range of student needs.
Conferences offer faculty opportunities to explore emerging trends in STEM education, particularly those related to addressing equity gaps. By learning new strategies, faculty can enhance their ability to provide holistic student support, improve teaching methods, and ensure that all students—regardless of their background—have clear and diverse pathways to success. These professional development opportunities also help faculty stay current with job skills training, ensuring that degree and certificate programs remain comprehensive and relevant to the globalized workforce.
Furthermore, conferences foster networking with other educators and professionals, which allows faculty to bring back valuable insights that contribute to the development of life-long learning opportunities and critical thinking skills in students. This reinforces the mission to help students succeed not only academically but also in their broader careers and life experiences, preparing them for success in a rapidly changing, interconnected world.

2. Strategic Priorities / Strategic Goals

Attending STEM conferences helps faculty innovate to achieve equitable student success by exposing us to the latest research, tools, and pedagogical strategies specifically designed to address educational disparities and promote inclusion.

STEM conferences are a hub for the most recent advancements in teaching methodologies. Faculty can learn about innovative approaches such as active learning, problem-based learning, and culturally responsive teaching, which have been shown to reduce achievement gaps for underrepresented student groups. These practices can be integrated into the classroom to ensure

that diverse learners, including those from marginalized or disadvantaged backgrounds, have better opportunities for success.

Conferences provide access to research and case studies that highlight successful interventions for closing equity gaps. Faculty can explore data-driven techniques for identifying and addressing disparities in student performance, such as targeted support systems, enhanced assessment methods, and personalized learning plans. These insights enable faculty to tailor their teaching to meet the specific needs of students who might otherwise fall behind.

Faculty attending STEM conferences often encounter new resources, tools, and technologies designed to create more inclusive STEM learning environments. These may include adaptive learning technologies, open educational resources (OER), or new digital tools that help overcome barriers to access, especially for distance learners or students with different learning needs. Incorporating these tools into the curriculum can make STEM education more accessible to all students.

Many STEM conferences offer workshops and sessions that focus specifically on equity in education, highlighting strategies that have been effective in closing gaps for underrepresented minorities, women in STEM, and first-generation college students. Faculty can engage with experts in the field, gaining actionable strategies they can apply immediately to their teaching practices to create a more inclusive environment.

Conferences provide opportunities for faculty to network with other educators, researchers, and thought leaders who are also focused on equity in STEM education. These collaborations can lead to new ideas, joint projects, or even grant opportunities to pilot innovative programs that support equity. Engaging with a diverse community of educators often sparks creative solutions that individual faculty members can bring back to their own classrooms.

Through workshops, panels, and presentations that address the challenges faced by historically marginalized groups in STEM, faculty gain a deeper understanding of the systemic barriers these students face. Conferences often offer strategies on how to build more supportive classroom environments, mentor underrepresented students, and develop pathways that increase retention and success rates for these populations. This equips faculty with the knowledge and resources needed to implement changes that directly support equitable outcomes.

Conferences frequently explore the intersectionality of race, gender, socioeconomic status, and other factors that affect student success. By understanding the multiple dimensions that impact student performance, faculty can innovate their teaching methods to be more inclusive, recognizing that different students face different challenges and may require varied forms of support to thrive.

Ongoing professional development, such as attending conferences, ensures that faculty stay at the forefront of educational innovation. This commitment to continuous improvement allows educators to refine their teaching practices over time, making adjustments based on the latest research and techniques that show promise in promoting equitable student success. These iterative improvements contribute to long-term, sustainable change within the institution.

Attending STEM conferences provides faculty with the knowledge, skills, and resources to innovate their teaching practices in ways that support equitable outcomes for all students. By implementing the lessons learned from these conferences, faculty can play a crucial role in

creating more inclusive, supportive, and effective educational environments where every student has the opportunity to succeed, which aligns with Strategic Priority 1.

3. Educational Master Plan

Our request supports the goal of equitable pathways to student completion.

4. Others: Such as Technology Plan , Facilities Master Plan, HR Staffing Plan, Professional Development Plan

ADMINISTRATIVE USE

Administrator: _____ Title: _____

Comments/Recommendations:

Signature: _____ Date: _____

Administrator: _____ Title: _____

Comments/Recommendations:

Unit Priority Ranking: _____ of _____

BUDGET INFORMATION

*(This section **MUST** be completed)*

Budget Program Number: _____ ☐ Restricted ☐ Unrestricted

Comments regarding Budget Information: _____

Signature: _____ Date: _____

BUDGET ALLOCATION PROPOSAL-OUT OF CYCLE

Date: 11/20/2024 Originator: Science Faculty

Program or Department Name: Academic Affairs / STEM

Dean/Vice President/Supervisor: Emily Garrison

What are you requesting? *(Brief)* Inventory Tracker

Amount Requested: $1500.00 ☐ One-time Funding ☒ Ongoing Funding

Funding Source (if known):

REQUEST TYPE:

☐ Personnel/Staffing	☒ Technology Resource	☐ Facilities Resource	☐ Professional Development
*Complete **Personnel/Staffing** section below*	*Complete **Technology** section below*	*Complete **Facilities** section below*	*Complete **Professional Development** section below*
☐ OTHER			

PERSONNEL/STAFFING REQUEST

Is the position request for: ☐ Faculty ☐ Classified ☐ Management/Confidential

Is the position requested: ☐ A new classification (Attach *proposed* job description, or *detailed* list of proposed duties)

☐ An existing classification *Official Job Title:*

Is the position requested: ☐ Full Time ☐ Part Time: _____ Months/Year _____ Hours/Week

TECHNOLOGY RESOURCE REQUEST

Indicate the category of the request:

☐ Hardware ☒ Software ☐ Printer/Copier ☐ Network ☐ Audio-Visual ☐ License/Maintenance

Indicate the intended users: ☐ Students ☐ Faculty ☐ Staff ☐ Other

Is training required? ☐ No ☒ Yes Explain:

How will it be secured? ☐ Alarm ☐ Secure Room ☐ Secure Cabinet ☐ Cable/Lock ☒ Password

Have you completed and attached the Technology Assessment Form?

FACILITIES RESOURCE REQUEST

Indicate the intended users: ☐ Students ☒ Faculty ☒ Staff ☐ Other

Is maintenance required? ☐ No ☐ Yes Explain:

PROFESSIONAL DEVELOPMENT REQUEST				
Indicate the intended users:	☐ Students	☐ Faculty	☐ Staff	☐ Other
Do other internal areas/departments need to be involved? ☐ No ☐ Yes Explain:				
Is technology needed? ☐ No ☐ Yes Explain:				

1. Why is the request being made?

An inventory tracker is essential for the Science Lab Department at Barstow Community College due to the large quantity and variety of chemicals required for student lab experiments. With hundreds of chemicals stored across multiple areas, a comprehensive tracking system ensures accurate inventory management, reducing the risk of running out of critical supplies or overordering. It promotes safety by allowing staff to monitor expiration dates, proper storage, and compliance with safety regulations. Additionally, an inventory tracker streamlines lab preparation, saving time for faculty and staff while supporting an efficient, well-organized learning environment for students.

2. a) Where in the Program Review/Annual Update is the request supported? Include the text from the Program Review AND cite the applicable section number(s).

An inventory tracker is a vital tool that must be utilized annually in the Science Lab Department to maintain accuracy and efficiency in managing our extensive collection of chemicals and supplies. Each year, the inventory changes as chemicals are consumed, new materials are purchased, and regulations regarding storage and safety evolve. An annual inventory tracker ensures that the department stays compliant with safety standards, keeps track of expiration dates, and avoids unnecessary expenditures by preventing overordering. Including this request in the Program Review goals highlights its importance in sustaining a well-organized, safe, and cost-effective environment that supports the educational needs of our students and faculty.

b) Explain how the request is supported with information gathered from the assessment of outcomes (Student Learning Outcomes, Program Level Outcomes, Service Area Outcomes, or Administrative Unit Outcomes).

The request for an annual inventory tracker is supported by information gathered from the assessment of outcomes, particularly Student Learning Outcomes (SLOs) and Program Level Outcomes (PLOs). Effective management of lab materials directly impacts the quality of hands-on learning experiences, which are critical for achieving SLOs related to laboratory safety, scientific inquiry, and technical skill development. The assessment of these outcomes has shown that students perform better when labs are well-stocked, organized, and compliant with safety standards. Additionally, Program Level Outcomes emphasize the importance of providing students with a comprehensive, resource-rich environment to prepare them for further academic or professional pursuits. The need for an inventory tracker also aligns with Service Area Outcomes (SAOs), as it ensures the lab operates efficiently, meeting the needs of students, faculty, and the institution. By tying the request to these assessments, it demonstrates how the inventory tracker supports continuous improvement and directly enhances student success and program effectiveness.

c) How was this included in the Area Goals section of your Program Review? Please cite section/item number and include the text.

An inventory tracker would directly support the goals of the STEM programs by ensuring that students have consistent access to the materials and chemicals needed for hands-on experiments, which are essential for developing critical scientific skills. By maintaining an accurate record of inventory, the tracker would prevent interruptions caused by missing or expired supplies, allowing STEM courses to run smoothly and on schedule. It would also enhance safety protocols, a priority in STEM fields, by monitoring proper storage and usage of potentially hazardous materials. Furthermore, the tracker would help optimize budgeting and resource allocation, ensuring that funds are spent strategically to support innovative teaching and research opportunities. Overall, this tool would enhance the quality of lab experiences, preparing students for advanced studies or careers in STEM fields by fostering a well-equipped, organized, and efficient learning environment.

3. If this item is approved, what departments or resources are needed, or would be affected, when implementing or developing it, on both a short-term and a long-term basis? Have they been notified?
Example: Technology Assessment Form
(This question is not required for Personnel/Staffing requests.)

If the inventory tracker is approved, several departments and resources will be involved or affected in its implementation and development, both in the short term and long term.

Short-term:
- IT Department: Assistance will be needed to procure, install, and configure the inventory tracking software or hardware.
- Science Lab Staff: Lab personnel will require initial training on how to use the system effectively, which may also involve dedicating time to input initial inventory data.
- Procurement: Coordination with the purchasing department to acquire the inventory tracker and any necessary licenses or subscriptions.

Long-term:
- Lab Staff and Faculty: Ongoing maintenance of the system will be required, including regular updates to the inventory as supplies are used or replenished. Staff will need to continuously input and review data to ensure the tracker remains accurate and useful.
- Budgeting and Administration: The system may require annual funding for updates, licenses, or support, which will need to be factored into departmental budgets.
- Compliance and Safety Teams: The tracker will likely interact with compliance departments to ensure chemicals and materials are stored and managed in accordance with safety regulations.

By involving these departments and resources, the inventory tracker can be effectively implemented to meet both immediate operational needs and long-term program goals.

4. a) **How will this resource improve student success or institutional services?**

The inventory tracker will significantly improve student success and institutional services by ensuring that lab courses are consistently well-prepared, organized, and safe. For students, having the necessary chemicals and supplies readily available minimizes disruptions during lab activities, allowing them to fully engage in hands-on learning and meet course objectives. This organized approach fosters a deeper understanding of scientific concepts and techniques, directly supporting academic achievement and skill development essential for STEM careers.

From an institutional perspective, the tracker enhances operational efficiency by reducing waste, preventing overordering, and maintaining compliance with safety regulations. It streamlines lab management, freeing up faculty and staff to focus on teaching and supporting

students. Additionally, the tracker aligns with institutional goals by promoting accountability, resource optimization, and a high-quality learning environment, all of which contribute to student retention, program reputation, and long-term success.

b) What data will you gather and analyze to demonstrate that your proposal is meeting this goal(s)?

To demonstrate that the inventory tracker is meeting its goals, several types of data will be gathered and analyzed. Lab preparation efficiency will be monitored by tracking the time required for staff to prepare and set up labs before and after implementation, with a decrease in preparation time indicating improved processes. Instances of missing or expired chemicals and supplies will also be recorded to determine if the tracker ensures better stock management, with fewer occurrences showcasing its effectiveness. Student outcomes will be analyzed by comparing performance on lab-related Student Learning Outcomes (SLOs) and overall course success rates, as improved scores or grades can be linked to the consistent availability of materials and smoother lab operations. Safety compliance will be evaluated through internal audits, with a reduction in violations demonstrating the system's role in supporting proper storage and handling of chemicals. Additionally, purchasing patterns and costs will be examined to highlight financial benefits, such as reduced waste and over ordering. Finally, qualitative feedback from lab staff and faculty will be collected to assess user satisfaction and the overall impact of the tracker. Together, these data points will provide a comprehensive evaluation of how the inventory tracker supports its intended goals.

5) Describe how your request is aligned with as many of the college's strategic planning documents as applicable. (If the request does not align with a document, indicate N/A.)

Please be specific and provide detail, ensuring a clear correlation between content of referenced document and the request. Cite the section and page numbers where the correlation can be found.

(Follow the links to access each document)

1. Mission Statement

The implementation of an inventory tracker aligns closely with Barstow Community College's mission statement by supporting equitable, accessible, and high-quality education for our diverse student body. By ensuring that all lab materials and chemicals are consistently available and safely managed, the tracker enhances access to hands-on learning opportunities for students from various backgrounds, including local, military, distance education, and historically marginalized populations. This resource directly contributes to the quality and comprehensiveness of our STEM programs, which are critical for developing job skills, critical thinking, and lifelong learning. Furthermore, by optimizing resource allocation and improving lab efficiency, the tracker helps maintain the affordability of our programs while upholding safety and compliance standards. In doing so, it supports the college's commitment to providing clear and diverse educational pathways that prepare students for success in a globalized world.

2. Strategic Priorities / Strategic Goals

The inventory tracker aligns with Barstow Community College's strategic goals by providing credible evidence through accurate inventory records, enabling the department to address pressing issues such as safety, compliance, and resource management from multiple perspectives. It facilitates informed decision-making by identifying efficient solutions for lab preparation and resource allocation. Ultimately, the tracker supports the College's commitment

to continuous quality improvement by enhancing lab operations and ensuring a safe, effective learning environment.

3. Educational Master Plan

The inventory tracker aligns with the Educational Master Plan by supporting the goal of providing a high-quality, accessible learning experience for all students. By ensuring that lab materials are consistently available and properly managed, the tracker contributes to the effective delivery of STEM courses, which are key components of the College's academic offerings. It enhances the College's ability to meet student learning outcomes and supports the development of critical thinking and job skills necessary for success in a globalized world. The tracker also helps maintain operational efficiency, enabling the institution to better allocate resources and support the College's long-term educational goals.

4. Others: Such as Technology Plan , Facilities Master Plan, HR Staffing Plan, Professional Development Plan

ADMINISTRATIVE USE

Administrator: _____ Title: _____

Comments/Recommendations:

Signature: _____ Date: _____

Administrator: _____ Title: _____

Comments/Recommendations:

Unit Priority Ranking: _____ of _____

BUDGET INFORMATION

*(This section **MUST** be completed)*

Budget Program Number: _____ ☐ Restricted ☐ Unrestricted

Comments regarding Budget Information: _____

Signature: _____ Date: _____

BARSTOW COMMUNITY COLLEGE DISTRICT
Technology Assessment Form for Software and Equipment

Directions:

The requestor will work with the Director of IT and the VP of Administrative Services to complete sections A-E and attach to their Administrative Unit or Program's Budget Allocation Proposal during the Program Review process.

A. Purchase Information

1. Requestor Name	Emily Garrison
2. Department or Program Name	Academic Affairs
3. Equipment/Software Description	Quartzy Inventory Tracker

B. Operational Expenses and Detailed Description of Required Services Needed

1. Software (Description and cost)	$1500.00 / Annually / 10 users each year
2. Hardware (Description and cost)	$0
3. Implementation costs	$0
4. Maintenance a) Software b) Hardware c) Programming d) Employee Set-up e) Inventory Control	$0
5. Subscription or Perpetual License a) yearly cost b) site licensing, per computer or per user licensing.	$1500.00 / 10 users
6. Who will maintain this product/application? a) Department b) IT Department c) Vendor	Laboratory Coordinator, faculty and administration
7. Is the quote attached for the new software/hardware?	Yes
8. Sustainability Requirement	No

C. Describe the Total Cost of Ownership (V.P. of Administrative Services)

(Include total cost of project, software and equipment (including human resource costs) in description) $1500.00

D. *Check all boxes to which this purchase applies*

Mission Statement *(must apply)*	
Barstow Community College is an open-access learning environment that promotes critical thinking, communication, personal and professional responsibility, and global awareness by offering quality courses, programs, and support services.	xC☐
Within accreditation standards?	☐
Maintains fiscal integrity?	☐
Promotes employee involvement in activities associated with professional responsibilities.	☐
Increases student engagement, student success and student equity?	☐
Promotes Workforce and Economic Development within the local community, the District and region?	☐
Strategic Priorities *(must apply to at least 1)*	
Innovates to Achieve Equitable Student Success?	☐
Ignites a Culture of Learning and Innovation?	☐
Builds Community?	☐
Achieves Sustainable Excellence in all Operations?	☐

E. Acknowledgement of receipt and awareness of terms, conditions, and regulations

Title	Name	Signature	Date
Initiator Supervisor	Emily Garison		
Director of IT	Juan Rivera		
Budget Analyst	Karli Godfrey		
VP Administrative Services	Deedee Garcia		

F. Approval of Purchase

Title	Name	Signature	Date
Cabinet Approval			
Superintendent/President			

BUDGET ALLOCATION PROPOSAL – OUT OF CYCLE

Date: 11/20/2024 Originator: Science Faculty

Program or Department Name: Biology AD-T, Pre-Allied Health

Dean/Vice President/Supervisor: Emily Garrison

What are you requesting? *(Brief)* Microscope Maintenance

Amount Requested: $4,500 ☐ One-time Funding ☒ Ongoing Funding

Funding Source (if known) :

REQUEST TYPE:

☐ Personnel/Staffing	☐ Technology Resource	☐ Facilities Resource	☒ OTHER
*Complete **Personnel/Staffing** section below*	*Complete **Technology** section below*	*Complete **Facilities** section below*	

PERSONNEL/STAFFING REQUEST

Is the position request for: ☐ Faculty ☐ Classified ☐ Management/Confidential

Is the position requested: ☐ A new classification (Attach *proposed* job description, or *detailed* list of proposed duties)

☐ An existing classification *Official Job Title:*

Is the position requested: ☐ Full Time ☐ Part Time: _____ Months/Year _____ Hours/Week

TECHNOLOGY RESOURCE REQUEST

Indicate the category of the request:

☐ Hardware ☐ Software ☐ Printer/Copier ☐ Network ☐ Audio-Visual ☐ License/Maintenance

Indicate the intended users: ☐ Students ☐ Faculty ☐ Staff ☐ Other

Is training required? ☐ No ☐ Yes Explain:

How will it be secured? ☐ Alarm ☐ Secure Room ☐ Secure Cabinet ☐ Cable/Lock ☐ Password

Have you completed and attached the Technology Assessment Form?

FACILITIES RESOURCE REQUEST

Indicate the intended users: ☐ Students ☐ Faculty ☐ Staff ☐ Other

Is maintenance required? ☐ No ☐ Yes Explain:

1. Why is the request being made?

Ongoing funding for microscope maintenance is essential to support student and program learning outcomes, promote equitable access to high-quality education, and ensure operational sustainability. Microscopes are critical tools in pre-allied health and biology courses, allowing students to develop technical proficiency, apply scientific methods, and analyze data—all key components of student learning outcomes. Regular maintenance ensures these instruments function accurately and reliably, enabling all students to achieve the same high standard of hands-on learning experiences.
Investing in maintenance also reflects responsible resource stewardship, extending the lifespan of costly equipment and reducing the need for frequent replacements. Reliable microscopes enhance student success by minimizing disruptions to laboratory activities, supporting equity by ensuring consistent access to well-functioning tools, and fostering a learning environment aligned with professional standards in healthcare and scientific fields. By securing funding for regular upkeep, the college demonstrates its commitment to educational excellence, workforce readiness, and operational efficiency.

2. a) What is the urgency for this request being made outside of the Annual Update/Program Review regular cycle?

This request should be made on an annual basis but we realized today that no one had requested this for the 2025-26 school year. Maintenance for the 2024-25 school year was recently completed.

b) Explain how the request is supported with information gathered from the assessment of outcomes (Student Learning Outcomes, Program Level Outcomes, Service Area Outcomes, or Administrative Unit Outcomes).

Regular access to properly functioning microscopes ensures students have the tools they need to meet established SLOs and PLOs, improving pass rates and learning outcomes. Assessment data collected from lab courses can demonstrate how access to these resources correlates with student achievement.

c) How was this included in the Area Goals section of your Program Review? Please cite section/item number and include the text.

As a routine request for materials necessary to teach the information on the Course Outline of Records, this request is not aligned with area goals. It is a fundamental, on-going need of the biology program.

3. If this item is approved, what departments or resources are needed, or would be affected, when implementing or developing it, on both a short-term and a long-term basis? Have they been notified?
Example: Technology Assessment Form
(This question is not required for Personnel/Staffing requests.)

N/A

4. a) How will this resource improve student success or institutional services?

Properly functioning microscopes are essential for fostering student success in biology courses. Microscopes enable hands-on learning, reinforce theoretical concepts, and ensure students develop the technical skills necessary for success at transfer institutions. By providing for the annual servicing of microscopes by the manufacturer, the College prolongs the life of this vital component of biology and pre-allied health courses.

b) What data will you gather and analyze to demonstrate that your proposal is meeting this goal(s)?

Regular access to microscopes ensures students have the tools they need to meet established SLOs and PLOs, improving pass rates and learning outcomes. Assessment data collected from lab courses can demonstrate how access to these resources correlates with student achievement. By monitoring how students perform in labs, faculty can identify areas for improvement in teaching or resource allocation, leading to better alignment with learning outcomes over time.

5) Describe how your request is aligned with as many of the college's strategic planning documents as applicable. (If the request does not align with a document, indicate N/A.)

Please be specific and provide detail, ensuring a clear correlation between content of referenced document and the request. Cite the section and page numbers where the correlation can be found.

(Follow the links to access each document)

1. Mission Statement

The biology program addresses educational equity by providing historically underrepresented and economically disadvantaged students with access to a pathway leading to stable, high-demand careers in industry, research, and academia. This aligns with the college's mission to support marginalized populations through accessible education. The program caters to Barstow's unique student demographics, including residents, and military-affiliated students. It offers flexible class schedules, hybrid options, and tailored advising to ensure accessibility for working students and those with family or military obligations. The $4500 allocation for microscope maintenance supports affordable lab-based courses that would otherwise be cost-prohibitive due to the high expense annually replacing microscopes. This investment ensures that all students, regardless of financial background, can access the necessary resources for success. The funding ensures the availability of up-to-date lab equipment: microscopes.

2. Strategic Priorities / Strategic Goals

The $4500 budget allocation for microscope maintenance exemplifies Barstow Community College's commitment to equitable student success and institutional excellence. By providing essential resources, maintaining equipment provides students with the knowledge and skills needed for successful transfer of lower division biology courses. It also advances sustainability and operational excellence by incorporating resource-efficient practices and supporting long-term institutional goals. This investment not only meets immediate educational needs but continues to build a foundation for a more inclusive, innovative, and connected future.

3. Educational Master Plan

Ongoing funding for microscope maintenance demonstrates Barstow Community College's commitment to responsible stewardship by optimizing resource utilization, maintaining program quality, and supporting long-term institutional sustainability. By investing in the maintenance, the allocation ensures that students receive a high-quality education at a reasonable cost while maximizing the return on investment for the college and community. This predictable and strategic use of funds supports the college's mission of providing equitable, accessible, and affordable education to its diverse student body.

4. Others: Such as Technology Plan , Facilities Master Plan, HR Staffing Plan, Professional Development Plan

ADMINISTRATIVE USE

Administrator: _____ Title: _____

Comments/Recommendations:

Signature: _____ Date: _____

Administrator: _____ Title: _____

Comments/Recommendations:

Unit Priority Ranking: _____ of _____

BUDGET INFORMATION

*(This section **MUST** be completed)*

Budget Program Number: _____ ☐ Restricted ☐ Unrestricted

Comments regarding Budget Information: _____

Signature: _____ Date: _____