Department:	Biology		
Academic Year:	2016-2017	Annual Update # 1	× Annual Update #2

1. Progress on Program Level Outcomes (PLOs) and Student Learning Outcomes (SLOs) (from #3B of full PR)

A) List your Program Level Outcomes:

- 1. Students will be prepared to enter further allied health sciences training or advance science classes after completing biology courses.
- 2. Students will demonstrate understanding of the processes of science, the scientific method, and the relationship between scientific research and established knowledge.
- 3. Students will conduct experiments and communicate results using appropriate formats.

B) Summarize the progress you have made on Program Level Outcomes (PLOs):

The two full-time faculty have identified how we are going to measure success with the PLOs. For PLO1, we are going to track the number of students successfully completing BIOL 4, 5, and 8 with a C or better. For PLO2, we are going to gauge success as measured by how many students successfully meet SLO1 across BIOL 2, 4, 5, and 8. For PLO3, we are going to gauge success as measured with SLO2 across BIOL 2, 4, 5, and 8.

C) Summarize the progress you have made on course level outcomes and assessments (SLOs):

We have re-written our SLOs and are in the process of updating those changes in CurricUNet so that they may be approved by Academic Senate. Our prior SLOs did not differentiate between courses and so revision was necessary. We have also unified our assessments used to track SLOs, which is a major step forward for our discipline. We will now be using the same type of assessment for our SLOs.

D) Describe any program, course, and/or instructional changes made by your program as a result of the outcomes assessment process.

As a result of the process, we recognized that our SLOs were the same across all BIOL courses, so were more like PLOs. Our new SLOs, which Ms. Ranney is in the process of entering in CurricUNet, reflect what we want students to be able to do as a result of successfully completing each course. We recognize that a student taking BIOL 10 is unlikely to becoming a biology major at a 4 year institution or enter a 2 or 4 year nursing program and so having outcomes reflective of their desire to take a science class, learn about life (scientifically speaking!), and progress to other classes, makes for a realistic assessment of whether or not we are successful in reaching these students. Likewise, we hold different expectations for students who are seeking to become nurses, doctors, or researchers and our SLOs now reflect the different skills and knowledge students should obtain by the end of our different courses. While our SLOs are more reflective of the skills and content we expect students to master in different classes, they revolve around common themes. For instance, our new, proposed SLO 2 for BIOL 4, 5, and 8 all center around students understanding current events/issues/research in human anatomy or medicine (BIOL 4), human physiology or medicine (BIOL 5), and applied or research microbiology (BIO 8). We expect students to be prepared to enter wider conversations of what is going in the biological sphere as globally aware citizens who are able to critically evaluate current biological events.

E) Reflecting on the responses for B) and C) above, what will you implement for the next assessment cycle?

For the next assessment cycle, we will be implementing our new SLOs, after they gain approval. We will also be working to develop a way to capture data from the adjuncts to better incorporate them into our discussion. As we expand in the Spring 2017 to offering night sections of BIOL 4 and BIOL 5, it is more

important than ever that Mr. Sage and Ms. Ranney find ways to be inclusive of the perspective that our discipline's adjuncts bring.

2. GOALS AND OBJECTIVES (Taken From #9--Action Plan--of FULL Program Review)

GOAL		OBJECTIVE		ACTIONS/TASKS REQUIRED TO ACHIEVE OBJECTIVE	OUTCOMES, MEASURES, and ASSESSMENT
#1	Development and implementation of certificate	#1	Find out the status of certificate	Talk to Dean Shreve	The result of this conversation will inform what steps we need to take next.
		#2	Provide any necessary data	Read and analyze proposed certificate	Submit any comments or revisions to administrators, resulting in an acceptable certificate
		#3	Enroll students in certificate track	Promote the advantages to students	We will be better able to capture how many students successfully complete our biology courses even if they do not complete an associate's degree from Barstow CC.

Goal #1 Annual Update: (Assess progress made toward goal attainment)

As of now, the certificate is on hold because if students complete the certificate, their financial aid status changes. This would not be a benefit to our students. We will need to find another way to track students beyond certificate completion.

GOAL		OBJECTIVE		ACTIONS/TASKS REQUIRED TO ACHIEVE OBJECTIVE	OUTCOMES, MEASURES, and ASSESSMENT
#2	Increase content- specific professional development conference attendance	#1	Provide administrators with conference information and data to support requests.	Complete Budget Allocation Proposal	PR and BAP will be reviewed by administration, resulting in feedback that will be implemented into forms.
		#2	Submit a revised Budget Allocation Proposal to administration.	Read and analyze Program Review and Budge Allocation Proposal suggestions.	Upon resubmission, an acceptable and approvable BAP will be generated.
		#3	Respond to requests for further clarification of discipline needs.	Revise and research data to support participation in contentspecific professional development conferences.	BAP will be approved!

Goal #2 Annual Update: (Assess progress made toward goal attainment)

Professional development conferences were held on the East Coast last year and will be in Midwest this year, making the time to travel to them incompatible with our teaching schedules. However, in November 2018, the National Association of Biology Teachers will be hosting their annual professional development conference in San Diego, CA. It would be beneficial for us to go to this conference to stay up to date with current pedagogical research.

	GOAL		OBJECTIVE	ACTIONS/TASKS REQUIRED TO ACHIEVE OBJECTIVE	OUTCOMES, MEASURES, and ASSESSMENT
#3	Increasing course offerings	#1	Identify biological areas to increase course offerings in	Discuss among faculty and identify career paths students may chose based on increased offerings	These conversations will lead to pinpointing the specific courses we wish to develop
		#2	Plan 1 course a year each year in the assessment cycle	Understand the Curricunet procedures required of new courses; talk to Kyri Freeman	We will be able to submit a viable course outline for approval
		#3	Gain approval of the course	Talk to Dean Shreve and expect submissions to Curriculum Committee and the Chancellor's Office	We will be able to offer new and exciting courses to students.

Goal #3 Annual Update: (Assess progress made toward goal attainment)

We have been meeting with Dean Shreve seeking ways to maximize our available laboratory space. Working with Chemistry, we lack physical lab space to offer more laboratory courses. However, while it was not a new course that needed to go through the above process, we did offer "Zombie Biology" last year (BIOL 10) with an English 1A course to form a learning community. That alternative format of BIOL 10 was an interesting experience and suggested to Ms. Ranney that we may look at developing some type of pop culture take on biology lecture class that could be offered every other spring or a current issues in biology class which could be taught online to satisfy general education science course requirements.

3. Resources Required

List all significant resources needed to achieve the objectives shown in your action plan, including personnel, training, technology, information, equipment, supplies, and space. Every request for additional resources must support at least one objective.

Also list any resources required to implement planned improvements noted in 3.C.3.

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	If No, indicate funding source