UNIVERSITY OF ARKANSAS
PULASKI TECH

Course-Level Assessment Report
Course: _ BIOL 1100 Non-Majors Biology Lab
Academic Year: __2021-2022____

1. Name of course: *BIOL 1300 Biology for Non-Major*

2. Name of individual(s) compiling report: *Aiwei Borengasser*

3. Date of submission: *9/1/2022*

4. Academic year: *2021-2022*

Course-Level Learning Outcomes

1. What are the Course-Level Outcomes (CLOs)?

Course Learning Outcomes: BIOL 1100 (lab)

1. Define the levels of the organization and related functions of bacteria, plants, and animals
2. Describe the characteristics and basic needs of living organisms
3. Analyze the processes of growth and inheritance in individuals and populations.
4. Test a hypothesis that is formulated from observations
5. Use of the microscope and other lab equipment

2. Which CLOs were addressed for the academic year?

CLO # 2 - Describe the characteristics and basic needs of living organisms

CLO #3 - Analyze the processes of growth and inheritance in individuals and populations.

3. Which CLOs are being addressed in your assessment plan in the upcoming academic year?

CLO #3 - Analyze the processes of growth and inheritance in individuals and populations.

4. How does this report connect or map to program-level or institutional-level outcomes?

CLO #3 connects to PLO #3 and ILO #2

For each Course Level Outcome assessed this academic year, please complete the chart below, providing the assessment data for both fall and spring, and then a total for the academic year.

Assessment Methods- How did you assess student learning (define direct assessment methods used) in relation to the course level outcome being reported? *Note: If more than one assessment method was used, you may insert an additional row.*	**CLO #3 - Analyze the processes of growth and inheritance in individuals and populations.** Direct. There were 14 common multiple-choice questions, embedded in an exam, given to every student over cell division (mitosis and meiosis) online. All students take the exam online, so we can analyze the data from an Item Analysis. These questions will be testing their knowledge and understanding of cell division (mitosis and meiosis).	
Were indirect assessment methods also used to assess students? If 'yes', please describe the method used.		***No***
How do you define success for an individual student on the CLO assessment assignment or measure?	*Student scores 70% on the questions linked to the CLO*	
How do you define success for the course level outcome? What is the benchmark for the Course Level Outcome?	*70% of students in the course achieve success on the CLO assessment assignment or measure*	
How many students completed the assessment, and how many were successful?	***CLO 3 Fall*** *35 students assessed* *35 successful* *(100% success rate)*	***CLO 3 Spring*** *94 students assessed* *77 successful* *(82% success rate)*
Academic Year Total (add the numbers from Fall and Spring)	*CLO 2: 129 students assessed* *112 successful* *(88% success rate)*	

	CLO 3: 119 students assessed *95 successful* *(80% success rate)*	
Was the benchmark/goal for this academic year met?	***Yes***	
Were standardized rubrics, tests, or checklists used?	***Yes***	

5. What is your analysis of the findings?

We exceeded our target of 70% overall success in the assessment for both semesters, so the evidence shows that students are successfully learning biological concepts in BIOL 1100 for non-majors lab. There were a few problem questions in the mitosis/meiosis where students went below the 70% threshold, while the combined 14 question average was well above 70%. These particular questions need to be examined to see if there is a problem with the questions or if we need to emphasis this content more.

Note: Out of the 14 questions, 10 questions over mitosis and meiosis are used in both the 1300 class and the 1100 lab. Most of the students are taking both, not just one or the other. The students get the 10 questions on an exam in the 1300 class earlier in the semester than the students in lab. They are studying the same process at the same time but tested over it at different times, which was thought to perhaps yield different results. However, the individual questions missed during the exam in 1300 were the same as the individual questions missed during the later exam (Final) in lab.

6. What is the action plan for the upcoming academic year? Explain.

CLO # 3 - Analyze the processes of growth and inheritance in individuals and populations.
CLO # 5 – Use of the microscope and other lab equipment.

We will continue to assess cell division in Fall 2022 and Spring 2023, looking at CLO 3 in more detail. We will review ways to cover the material on the problem questions for the cell division assessment or rewrite the questions if needed.
We will use 10 common questions on the microscope to assess CLO 5 for Fall 2021 and Spring 2022.

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