

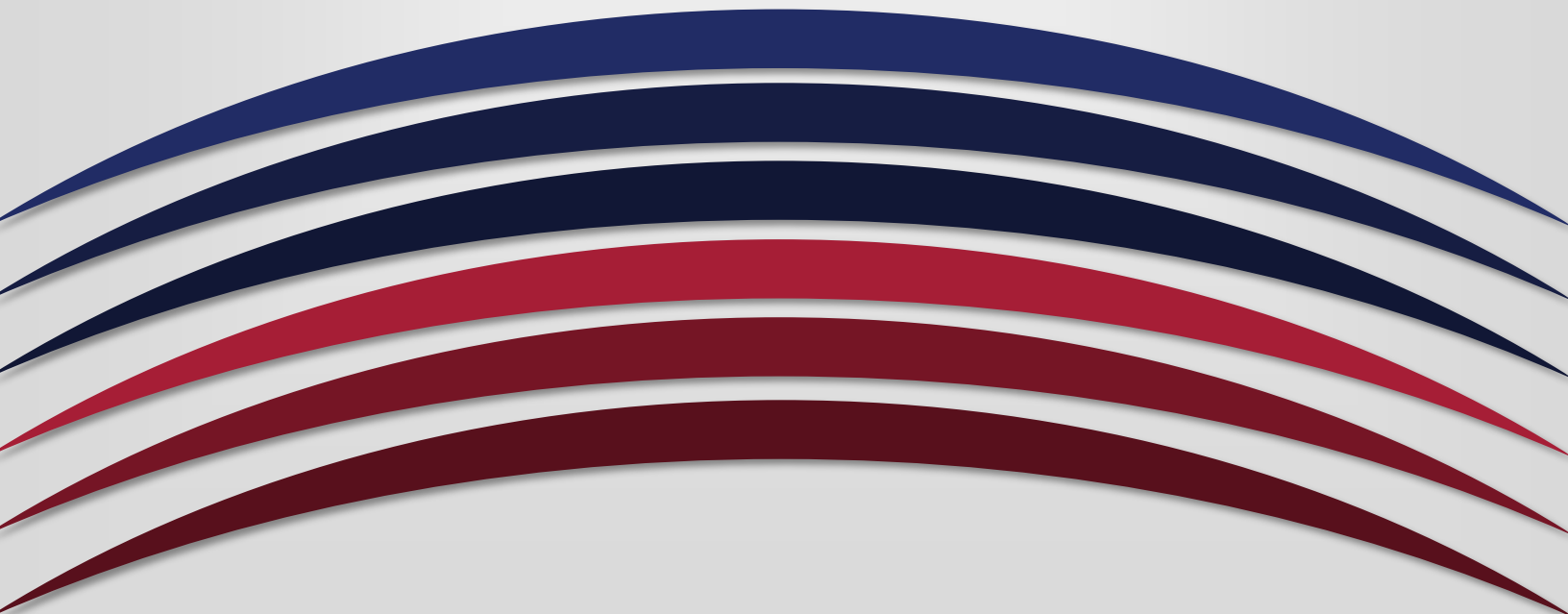
UNIVERSITY OF ARKANSAS
PULASKI TECH

Course-Level Assessment Report

**Course: Human Anatomy &
Physiology I Laboratory**

BIOL 1104

Academic Year: 2020-2021



1. Name of course: Human Anatomy & Physiology I Laboratory
2. Name of individual(s) compiling report: Darrellyn Williams, DC
3. Date of submission: August 09, 2021
4. Academic year: 2020-2021

Course-Level Learning Outcomes

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

Course Learning Outcomes: BIOL 1104 Human Anatomy & Physiology I Lab Course

1. **Body Organization** The student will explain, describe, discuss, recognize, and/or apply knowledge and understanding of the body organization (includes terms, basic biochemistry, cellular structure & function, metabolism, histology, & integumentary system)
2. **Musculoskeletal System** The student will explain, describe, discuss, recognize, and/or apply knowledge and understanding of the musculoskeletal system (includes muscular system, skeletal system, & joints)
3. **Nervous System** The student will explain, describe, discuss, recognize, and/or apply knowledge and understanding of the nervous system (includes nervous system & general senses)
4. **Lab** The student will explain, describe, discuss, recognize, and/or apply knowledge and understanding of proper use of microscope, other lab equipment, and lab techniques

2. Which CLOs were addressed for the academic year?

CLO # 2 (Musculoskeletal system)

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

CLO # 2 (Musculoskeletal system)

4. Explain the assessment cycle.

Standardized assessment for reported CLO(s) is administered each semester.

5. What are the assessment methods? Are they direct or indirect?

CLO 1 (Body Organization): Direct

Labeling quiz for histology is under reconstruction for next academic year.

CLO 2 (Musculoskeletal system): Direct

- 1) Standardized Skeleton Quiz. Identify and label selected bones and bone markings. Quiz is administered as an in-person written quiz or online through Blackboard. Quiz is timed and has no word bank. Study guide of images with labels are provided to the students.
- 2) Standardized Muscle Quiz. Identify and label selected muscles. Quiz is administered as an in-person written quiz or online through Blackboard. Quiz is timed and has no word bank. Study guide of images with labels are provided to the students.

CLO 3 (Nervous system):

Undetermined at the time of this report

CLO 4 (Lab equipment use & techniques): Direct

Practical in-person demonstration on how to properly use a microscope. Prior to the pandemic of 2020 Anatomy & Physiology laboratory courses were not offered online. As a result of the pivot to ERT (Emergency Remote Teaching) for all courses in the spring of 2020, laboratory courses since that time are now offered as a fully online course along with the traditional in-person course. This practical assessment of having the student demonstrate, in-person, how to properly use a microscope has been suspended at this time.

6. What are the assessment goal(s), including benchmarks?

Success for CLO # 1 (Body organization), CLO # 2 (Musculoskeletal system), and CLO # 3 (Nervous system) will be measured with 70% of all sections combined passing at 70+% for each CLO.

Success for CLO # 4 (Lab Equipment & techniques) will be measured with 80% of all combined sections passing at 70+%.

7. What were the findings for the academic year?

CLO # 2 (Musculoskeletal system)	Fall 2020	Spring 2021	Annual Totals
Assessment Method: Bone labeling quiz			
All Types of Courses (Traditional, Online, Webinar, & Hybrid)			
Total # of students assessed (who attempted the assessment)	118	199	317
Total # of student who successfully completed the assessment with a score of 70+%	90	132	222
Total percentage of students who passed with a score of 70+%	76%	66%	70%
Traditional Courses			
Total # of traditional students assessed (who attempted the assessment)	118	133	251
Total # of traditional students who successfully completed the assessment with a score of 70+%	90	92	182
Total percentage of traditional students who passed with a score of 70+%	76%	69%	73%
Online Courses			
*Note: Online lab course was not offered during Fall 2020. *Hyflex attendance of offered.			
Total # of online students assessed (who attempted the assessment)	*N/A	66	66
Total # of online students who successfully completed the assessment with a score of 70+%	*N/A	40	40
Total percentage of online students who passed with a score of 70+%	*N/A	61%	61%
Webinar Courses			
Note: Webinar lab course was not offered during 2020-21 academic year.			
None	0	0	0
Hybrid Courses			
Note: Hybrid lab course was not offered during 2020-21 academic year.			
None	0	0	0

CLO # 2 (Musculoskeletal system)	Fall 2020	Spring 2021	Annual Totals
Assessment Method: Muscle labeling quiz			
All Types of Courses (Traditional, Online, Webinar, & Hybrid)			
Total # of students assessed (who attempted the assessment)	113	180	293
Total # of student who successfully completed the assessment with a score of 70+%	100	153	253
Total percentage of students who passed with a score of 70+%	89%	85%	86%
Traditional Courses			
Total # of traditional students assessed (who attempted the assessment)	113	115	293

Total # of traditional students who successfully completed the assessment with a score of 70+%	100	101	253
Total percentage of traditional students who passed with a score of 70+%	89%	88%	86%
Online Courses			
*Note: Online lab course was not offered during Fall 2020. **Hyflex attendance was offered			
Total # of online students assessed (who attempted the assessment)	*N/A	65	62
Total # of online students who successfully completed the assessment with a score of 70+%	*N/A	52	52
Total percentage of online students who passed with a score of 70+%	*N/A	80%	80%
Webinar Courses			
Note: Webinar lab course was not offered during 2020-21 academic year.	N/A	N/A	N/A
Hybrid Courses			
Note: Webinar lab course was not offered during 2020-21 academic year.	N/A	N/A	N/A

**Hyflex attendance allowed the student to select how they wished to attend a course. Either in-person on assigned days (to provide social distancing) or synchronously and/or asynchronously via remote/virtual.

Note: Student who registered for a traditional course were included in the traditional course regardless of HyFlex attendance choice selected for the fall 2020 semester. HyFlex attendance choice allowed the student to select the method of attendance for a traditional course.

8. What is your analysis of the findings?

CLO 2 (Musculoskeletal system)

Assessment Method: Bone labeling quiz

The assessment goal of an overall pass rate of 70% of all sections combined passing at 70+% was achieved. Combined passing percentage was 70%. The traditional courses achieved the goal at 73%, but the online courses only had a 61% pass rate. This may be due to fewer students enrolled in the online lab course. It should be noted that the previous year yielded only a 51% overall pass rate. Student's scores appear to be significantly lower when the quiz was administered only in-person under a proctor versus being offered online in an unproctored environment. Administering the quiz online rather than in-person was due to the pivot to ERT (Emergency Remote Teaching) and continuing safety protocols in response to the pandemic. Comments from the faculty indicated that

items which were missed-labeled in the online quiz were due to students not reading the instructions and recording the name of a bone when the question asked for them to label a bone marking and vice-versa. After the Respondus lockdown browser became available through Blackboard one instructor required students to use this online proctoring service for the spring 2021 semester. It was noted that the scores in the sections taught by this instructor were around the previous year's results, extremely high with no proctoring for the fall 2020 semester and lower with the Respondus proctoring service used in the spring 2021 semester.

Assessment Method: Muscle labeling quiz

The assessment goal of an overall pass rate of 65% of all sections combined passing at 70+% was achieved. Combined passing percentage was 86%. There was no significant difference between the pass rates for the traditional and online courses. It should be noted that the previous year yielded only a 51% overall pass rate. Student's scores appear to be significantly lower when the quiz was administered only in-person under a proctor versus being offered online in an unproctored environment. Administering the quiz online rather than in-person was due to the pivot to ERT (Emergency Remote Teaching) and continuing safety protocols in response to the pandemic. Comments from the faculty indicated that items which were missed-labeled were due to students not reading the instructions and recording the name of a bone when the question asked for them to label a bone marking and vice-versa. After the Respondus lockdown browser became available through Blackboard one instructor required students to use this online proctoring service for the spring 2021 semester. A similar pattern as with the bone quiz was noted. The scores in the sections taught by this instructor were around the previous year's results, extremely high with no proctoring for the fall 2020 semester and lower with the Respondus proctoring service used in the spring 2021 semester.

Noted Trend: Lack of Student Participation in Assessment:

Faculty observed and reported a trend with students not submitting the assessment quizzes since moving the assessments to an online format. To discover the possible cause and determine if any corrective actions are needed, data has been collected during this reporting period. (Data collected is not shown in the data charts of this report). Calculations of the data collected showed that 5% of the students did not attempt the bone quiz in the fall 2020 semester and then 15% did not attempt it in the spring 2021 semester. For the muscle quiz, 31% did not attempt it in the fall 2020 semester and 23% did not attempt it in the spring 2021 semester. These two quizzes combined were worth 0.8 % of the total grade. The minimal impact on the overall grade could be a factor for students not attempting these quizzes. Also, alteration of standard education delivery methods due to the pandemic could be a contributing factor. Prior to the pandemic Anatomy & Physiology laboratory students completed the assessment quizzes when they attended the in-person lab session or took a makeup quiz if they were absent the day the quiz was administered. Even though makeups were offered in the online testing environment many students still did not complete and submit the assessment quizzes.

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

CLO 1 (Body organization)

Develop a new common histology quiz which can be administered in-person or online through Blackboard. This will replace the previous assessment which was only available online through the integrated access on Blackboard. Like the Bone and Muscle labeling quizzes the student will identify and label selected histology tissues/cells/structures. Quiz will be timed and will not have a word bank. A study guide of images with labels will be provided to the students.

CLO 2 (Musculoskeletal system)

- 1) Continue common skeleton quiz. Student will identify and label selected bones and bone markings. Quiz will be administered as an in-person written quiz or online through Blackboard. Quiz will be timed. No word bank will be allowed. A study guide of images with labels will be provided to the students.
- 2) Continue common muscle quiz. Students will identify and label selected muscles. Quiz is administered as an in-person written quiz or online through Blackboard. Quiz will be administered as an in-person written quiz or online through Blackboard. Quiz will be timed. No word bank will be allowed. A study guide of images with labels will be provided to the students.

CLO 3 (Nervous system):

Develop a common assessment which can be administered in-person and online.

CLO 4 (Lab equipment & techniques)

Alter previous assessment and/or develop a different common assessment which can be administered in-person and online.

Noted Trend: Lack of Student Participation in Assessment:

Data will continue to be collected and analyzed for possible causation and to determine if a plan is necessary for improved student participation. Faculty will attempt individual efforts to encourage participation and then share the results.