

General Education Student Learning Report (rev. 7/15)

Fall 2019 – Spring 2020

Department of Biology

Effectively assessing a degree program should address a number of factors:

- 1) Valid student learning outcomes should be clearly articulated;
- 2) Valid assessment measures should be used, consistent with the standards of professional practice;
- 3) There should be evidence that assessment data are being used by faculty to make necessary instructional or assessment changes; and there should be evidence that instructional or assessment changes are being implemented to improve student learning.

Relationship of Degree Program Learning Outcomes to Departmental and University Missions

RSU Mission	General Education Mission
<p>Our mission is to ensure students develop the skills and knowledge required to achieve professional and personal goals in dynamic local and global communities</p>	<p>General Education at Rogers State University provides a broad foundation of intellectual skills, knowledge, and perspectives to enable students across the University to achieve professional and personal goals in a dynamic local or global society.</p>
RSU Commitments	General Education Outcomes
<p>To provide quality associate, baccalaureate, and graduate degree opportunities and educational experiences which foster student excellence in oral and written communications, scientific reasoning, and critical and creative thinking.</p> <p>To promote an atmosphere of academic and intellectual freedom and respect for diverse expression in an environment of physical safety that is supportive of teaching and learning.</p> <p>To provide a general liberal arts education that supports specialized academic programs and prepares students for lifelong learning and service in a diverse society.</p>	<p>1) Think critically and creatively. 2) Acquire, analyze, and evaluate knowledge of human cultures and the physical and natural world. 3) Use written, oral, and visual communication effectively. 4) Develop an individual perspective on the human experience, and demonstrate an understanding of diverse perspectives and values. 5) Demonstrate civic knowledge and engagement, ethical reasoning, and skills for lifelong learning.</p> <p>1) Think critically and creatively. 2) Acquire, analyze, and evaluate knowledge of human cultures and the physical and natural world. 3) Use written, oral, and visual communication effectively. 4) Develop an individual perspective on the human experience, and demonstrate an understanding of diverse perspectives and values. 5) Demonstrate civic knowledge and engagement, ethical reasoning,</p>

RSU Mission	General Education Mission
	and skills for lifelong learning.
To provide students with a diverse, innovative faculty dedicated to excellence in teaching, scholarly pursuits, and continuous improvement of programs.	
To provide university-wide student services, activities, and resources that complement academic programs.	
To support and strengthen student, faculty, and administrative structures that promote shared governance of the institution.	
To promote and encourage student, faculty, staff, and community interaction in a positive academic climate that creates opportunities for cultural, intellectual, and personal enrichment for the university and the communities it serves.	

PART 1

Discussion of Instructional Changes Resulting from 2018-2019 General Education Student Learning Report

List and discuss all instructional or assessment changes proposed in Part 4 of last year's General Education Student Learning Report, whether implemented or not. Any other changes or assessment activities from last year, but not mentioned in last year's report, should be discussed here as well. Emphasis should be placed on student learning and considerations such as course improvements, the assessment process, and the budget. If no changes were planned or implemented, simply state "No changes were planned or implemented."

Instructional or Assessment Changes	Changes Implemented (Y/N)	Impact of Changes on Curriculum or Budget
We may adopt a set of common assessment questions to be used by all lab instructors on lab exams. We must rely heavily on adjunct instructors for covering our numerous freshman biology lab sections. Continuity and consistency of instruction among these instructors has long been a concern.	Y	Starting in Spring 2020, a pool of shared assessment questions was used across lab instructors in BIOL 1114 and 1144. Adjunct instructors received individual training in regards to assessment and grading techniques. These changes resulted in a greater consistency of grades across all lab sections compared to previous semesters.
Changes to the lab curriculum. Finding the right mixture of lab content is an ongoing process in our freshman labs. Some labs try to incorporate too much into the 110 minute period, while others are too sparse. We are also trying to incorporate more scientific instrumentation and more essential lab techniques into our lab activities.	Y	Lab preparatory material for BIOL 1114 and 1144 were put online for students to complete before the start of class. This makes for a more efficient use of the 110-minute lab period. Additionally, several BIOL 1144 labs have incorporated a greater amount of scientific instrumentation into the exercises to acquaint students with their purpose and utilization.

PART 2

Discussion of the University Assessment Committee's 2018-2019 Peer Review Report

The University Assessment Committee in its Degree Program Peer Review Report provided feedback and recommendations for improvement in assessment. List or accurately summarize all feedback and recommendations from the committee, and state whether they were implemented or will be implemented at a future date. If they were not or will not be implemented, please explain why. If no changes were recommended last year, simply state "No changes were recommended."

Feedback and Recommended Changes from the University Assessment Committee	Suggestions Implemented (Y/N)	Changes that Were or Will Be Implemented, or Rationale for Changes that Were Not Implemented
No changes were recommended.		

PART 3

Analysis of Evidence of Student Learning Outcomes

The five General Education Outcomes are listed below. For each outcome, indicate the General Education courses being assessed, and provide a brief narrative of the assessment measures and performance standards used, as well as the sampling methods and sample sizes. For each measure, document the results of the activity measured and draw any relevant conclusions related to strengths and weaknesses of their performance. Finally, indicate whether the performance measure was met or not.

OUTCOME 1: Think critically and creatively

A. Course	B. Assessment Measures	C. Performance Standards	D. Sampling Methods	E. Sample Size (N)	F. Results	G. Conclusions	H. Performance Standards Met (Y/N)																
BIOL 1114: General Biology	Science Literacy Quiz Comprises a 15-question multiple choice quiz on principles of science & the scientific method. This quiz is given in our	70% of students will score 70% or above.	Given to all enrolled students in Fall & Spring terms.	123	This table summarizes for student scores. <table border="1" data-bbox="1104 724 1380 1008"> <thead> <tr> <th>Score Distribution</th> <th></th> </tr> </thead> <tbody> <tr> <td>0-49%</td> <td>9</td> </tr> <tr> <td>50-59%</td> <td>6</td> </tr> <tr> <td>60-69%</td> <td>19</td> </tr> <tr> <td>70-79%</td> <td>19</td> </tr> <tr> <td>80-89%</td> <td>45</td> </tr> <tr> <td>90-100%</td> <td>25</td> </tr> <tr> <td>Average:</td> <td>76.9%</td> </tr> </tbody> </table>	Score Distribution		0-49%	9	50-59%	6	60-69%	19	70-79%	19	80-89%	45	90-100%	25	Average:	76.9%	The average score was 76.9%. 72.4% (89 of 123) scored $\geq 70\%$. Student performance has met the standard in six of the last seven years. Below are average score and percentage that met the standard for the last six years.	Y
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	lab sections.					2019-20 76.9 72% 2018-19 78.2 75% 2017-18 71.3 56% 2016-17 74.8 70% 2015-16 77.6 73% 2014-15 77.7 75% This demonstrates that students can apply critical thinking in evaluating scientific evidence.																	
BIOL 1144: General Cell Biology	Science Literacy Quiz Comprises a 15-question multiple choice assessment on the principles of science and the scientific method. This quiz is given in our lab sections.	70% of students will score 70% or above.	Given to all enrolled students in Fall & Spring terms.	77	This table summarizes student scores. <table border="1" data-bbox="722 724 950 1018"> <thead> <tr> <th>Score Distribution</th> <th></th> </tr> </thead> <tbody> <tr> <td>0-49%</td> <td>6</td> </tr> <tr> <td>50-59%</td> <td>3</td> </tr> <tr> <td>60-69%</td> <td>16</td> </tr> <tr> <td>70-79%</td> <td>12</td> </tr> <tr> <td>80-89%</td> <td>23</td> </tr> <tr> <td>90-100%</td> <td>17</td> </tr> <tr> <td>Average:</td> <td>76.5%</td> </tr> </tbody> </table>	Score Distribution		0-49%	6	50-59%	3	60-69%	16	70-79%	12	80-89%	23	90-100%	17	Average:	76.5%	The average score was 76.5%. 67.5% (52 of 77) scored $\geq 70\%$. Below are average score and percentage that met the standard for the last six years. 2019-20 76.5 77% 2018-19 76.8 76% 2017-18 77.4 74% 2016-17 78.7 75% 2015-16 79.8 82% 2014-15 77.1 70% This demonstrates that students can apply critical thinking in evaluating scientific evidence.	Y
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OUTCOME 2: Acquire, analyze, and evaluate knowledge of human cultures and the physical and natural world.

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BIOL 1114: General Biology	Comprehensive Pre-Post Exam 50 multiple-choice question exam on basic concepts of biology. Administered on first day of lecture class and at the time of final exam. We consider two results: 1) post test scores, and 2) the difference in pre-post test scores. Here, we discuss the post-test score results. Change in pre-post scores is discussed in next section.	70% of students will score 70% or above.	Given to all enrolled students in Fall & Spring terms.	192	This table summarizes student scores. <table border="1" data-bbox="431 722 683 982"> <thead> <tr> <th colspan="2">Score Distribution</th> </tr> </thead> <tbody> <tr> <td>0-49%</td> <td>14</td> </tr> <tr> <td>50-59%</td> <td>12</td> </tr> <tr> <td>60-69%</td> <td>25</td> </tr> <tr> <td>70-79%</td> <td>36</td> </tr> <tr> <td>80-89%</td> <td>64</td> </tr> <tr> <td>90-100%</td> <td>41</td> </tr> <tr> <td>Average:</td> <td>76.9%</td> </tr> </tbody> </table>	Score Distribution		0-49%	14	50-59%	12	60-69%	25	70-79%	36	80-89%	64	90-100%	41	Average:	76.9%	The average score was 76.9%. 73% (141 of 192) of students met the standard of scoring 70% or higher. Below are average score and percentage that met the standard for the last five years. 2019-20 76.9 73% 2018-19 67.4 48% 2017-18 68.1 47% 2016-17 70.9 58% 2015-16 64.4 35% 2014-15 67.7 48%	Y
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						This is the highest overall average in the last six academic years. It is also the first time that we have met the standard during this same period. There is, however, good reason to be suspicious of these findings. The Spring 2020 numbers were much higher than the previous Fall. Due to the COVID-19 virus, the post-test was administered online during finals week without any formal proctoring. Students, therefore, were																	

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BIOL 1114R: General Biology (Online)	Comprehensive Final Exam Comprehensive review of topics covered over the entire term.	70% of students will score 70% or above.	Given to all enrolled students in Fall & Spring terms.	107	<p>This frequency table summarizes student scores.</p> <table border="1" data-bbox="771 724 998 997"> <thead> <tr> <th colspan="2">Score Distribution</th> </tr> </thead> <tbody> <tr> <td>0-49%</td> <td>0</td> </tr> <tr> <td>50-59%</td> <td>4</td> </tr> <tr> <td>60-69%</td> <td>5</td> </tr> <tr> <td>70-79%</td> <td>28</td> </tr> <tr> <td>80-89%</td> <td>51</td> </tr> <tr> <td>90-100%</td> <td>12</td> </tr> <tr> <td>Average:</td> <td>81.1%</td> </tr> </tbody> </table>	Score Distribution		0-49%	0	50-59%	4	60-69%	5	70-79%	28	80-89%	51	90-100%	12	Average:	81.1%	<p>valid, as the post-test portion of the assessment was administered online due to the COVID-19 crisis. This was done without any formal exam proctoring. The improvement over the pre-test was much higher in the spring semester than in the fall.</p>	Y		
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					<p>The average score was 91.5%. 96% (103 of 107) scored $\geq 70\%$. Below are exam averages and percentage that met the standard for the last six years.</p> <table border="1" data-bbox="901 420 1071 651"> <tbody> <tr> <td>2019-20</td> <td>91.5</td> <td>96%</td> </tr> <tr> <td>2018-19</td> <td>81.1</td> <td>91%</td> </tr> <tr> <td>2017-18</td> <td>85.0</td> <td>92%</td> </tr> <tr> <td>2016-17</td> <td>86.0</td> <td>90%</td> </tr> <tr> <td>2015-16</td> <td>79.1</td> <td>84%</td> </tr> <tr> <td>2014-15</td> <td>79.2</td> <td>86%</td> </tr> </tbody> </table> <p>Students have met the standard in the last six academic years. The exam average and the proportion of students scoring above 70% was notably higher in this academic year versus previous years. Student progress in this</p>	2019-20	91.5	96%	2018-19	81.1	91%	2017-18	85.0	92%	2016-17	86.0	90%	2015-16	79.1	84%	2014-15	79.2	86%		
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BIOL 1144: General Cell Biology	Comprehensive Pre-Post Exam 50 multiple-choice question exam on basic concepts of biology. Administered on first day of lecture class and at the time of final exam. We consider two results: 1) post test scores, and 2) the difference in pre-post test scores. Here, we discuss the post-test score results. Change in pre-post scores is	70% of students will score 70% or above.	Given to all enrolled students in Fall & Spring terms.	153	This frequency table summarizes student scores. <table border="1" data-bbox="743 730 997 991"> <thead> <tr> <th colspan="2">Score Distribution</th> </tr> </thead> <tbody> <tr> <td>0-49%</td> <td>23</td> </tr> <tr> <td>50-59%</td> <td>13</td> </tr> <tr> <td>60-69%</td> <td>14</td> </tr> <tr> <td>70-79%</td> <td>34</td> </tr> <tr> <td>80-89%</td> <td>45</td> </tr> <tr> <td>90-100%</td> <td>32</td> </tr> <tr> <td>Average:</td> <td>73.1%</td> </tr> </tbody> </table>	Score Distribution		0-49%	23	50-59%	13	60-69%	14	70-79%	34	80-89%	45	90-100%	32	Average:	73.1%	online course has been much higher than the on-ground course. This course has been routinely taught by an adjunct, so there may be differences in the course rigor. It is not known whether the instructor requires any proctoring for exams.	N
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	discussed in next section.					of the desired 70%. The post-test portion of the assessment was given online as part of a final exam. As proctoring was not used, some of this increase may be due to student cheating.	
BIOL 1144: General Cell Biology	Comprehensive Pre-Post Exam 50 multiple-choice question exam on basic concepts of biology. Administered on first day of lecture class and at the time of final exam. We consider two results: 1) post test scores, and 2) the difference in pre-post test scores Here, we discuss the change between pre and pre-post test scores.	70% of students will improve on the post-test by 20% or greater over the pre-test.	Given to all enrolled students in Fall & Spring terms.	217	This frequency table summarizes student scores. Score Distribution (Post Test Improvement) 0-10% 26 10-20% 9 20-30% 20 30-40% 32 40-50% 36 50-60% 19 60-70% 10 Average gain: 33.2	Mean improvement was 33 percentage points. 77% (117 of 152) of students improved their score by $\geq 20\%$. Below are the average score improvement and percentage that met the standard for the last six years. 2019-20 33.2 77% 2018-19 28.5 71% 2017-18 25.8 67% 2016-17 24.5 61% 2015-16 26.5 67% 2014-15 29.0 75% As in the past, however, a much larger percentage of the student population are meeting this standard vs the post-test score measure with the same test. This is the second consecutive year that our students have met this standard. Moreover, the improve-	Y

A. Course	B. Assessment Measures	C. Performance Standards	D. Sampling Methods	E. Sample Size (N)	F. Results	G. Conclusions	H. Performance Standards Met (Y/N)																
						<p>ment of 33.2 percentage points over the pre-test was highest seen over the last six year. As this exam was administered online due to the COVID-19 pandemic, these results should be viewed critically.</p>																	
BIOL 1144: General Cell Biology (Online)	Comprehensive Final Exam	70% of students will score 70% or higher.	Given to all enrolled students in Fall & Spring terms.	52	<p>This frequency table summarizes student scores.</p> <table border="1" data-bbox="690 735 941 997"> <thead> <tr> <th>Score Distribution</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>0-49%</td> <td>37</td> </tr> <tr> <td>50-59%</td> <td>9</td> </tr> <tr> <td>60-69%</td> <td>1</td> </tr> <tr> <td>70-79%</td> <td>3</td> </tr> <tr> <td>80-89%</td> <td>1</td> </tr> <tr> <td>90-100%</td> <td>1</td> </tr> <tr> <td>Average:</td> <td>45.6%</td> </tr> </tbody> </table>	Score Distribution	Count	0-49%	37	50-59%	9	60-69%	1	70-79%	3	80-89%	1	90-100%	1	Average:	45.6%	<p>Final exam scores in this online course have been notably low. The unit exam scores, in contrast, are much higher. The instructor indicates that the final is proctored, while the individual unit exams are not. This suggests that some students may be cheating in the unproctored exams and are not adequately prepared for the proctored final.</p>	N
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BIOL 1134: General Environmental Biology	Comprehensive Final Exam Multiple-choice comprehensive exam of the concepts covered during the semester.	70% of students will score 70% or higher.	Given to all enrolled students in the Fall & Spring terms	36	<p>This frequency table summarizes student scores.</p>	<p>The average test score was 78%. 92% (21 of 26) scored $\geq 70\%$. Below are average test scores & the percentage of students that met the standard for the last six years.</p> <table border="1" data-bbox="1331 441 1421 682"> <tbody> <tr> <td>2019-20</td> <td>78.0</td> <td>92%</td> </tr> <tr> <td>2018-19</td> <td>72.2</td> <td>58%</td> </tr> <tr> <td>2017-18</td> <td>75.6</td> <td>74%</td> </tr> </tbody> </table>	2019-20	78.0	92%	2018-19	72.2	58%	2017-18	75.6	74%	Y							
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BIOL 1134R: General Environmental Biology (Online)	Final Exam or Average of Unit Exams	70% of students will score 70% or above.	Given to all enrolled students in online sections	48	<p>Score Distribution</p> <table border="1"> <tr><td>0-49%</td><td>0</td></tr> <tr><td>50-59%</td><td>2</td></tr> <tr><td>60-69%</td><td>3</td></tr> <tr><td>70-79%</td><td>8</td></tr> <tr><td>80-89%</td><td>11</td></tr> <tr><td>90-100%</td><td>2</td></tr> <tr><td>Average:</td><td>78.0%</td></tr> </table>	0-49%	0	50-59%	2	60-69%	3	70-79%	8	80-89%	11	90-100%	2	Average:	78.0%	<p>2016-17 80.0 82% 2015-16 80.7 70% 2014-15 77.2 70%</p> <p>The standard has been met in five of the last six years. This demonstrates that students are able to, analyze and evaluate knowledge of human cultures and the physical and natural world.</p> <p>It should be noted that while this year's average was similar to previous years, the percentage of students meeting the benchmark was much higher. The final exam was administered online without any proctoring, so cheating may have elevated scores.</p>	Y		
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0-49%	6																						
50-59%	0																						
60-69%	2																						
70-79%	9																						
80-89%	20																						
90-100%	11																						
Average:	77.0%																						

A. Course	B. Assessment Measures	C. Performance Standards	D. Sampling Methods	E. Sample Size (N)	F. Results	G. Conclusions	H. Performance Standards Met (Y/N)
						2014-15 76.0 85% The percentage of students meeting the 70% benchmark has exceed 80% for the last three years. This shows that students demonstrate an ability to acquire and analyze knowledge about the natural world.	

OUTCOME 3: Use written, oral, and visual communication effectively.

A. Course	B. Assessment Measures	C. Performance Standards	D. Sampling Methods	E. Sample Size (N)	F. Results	G. Conclusions	H. Performance Standards Met (Y/N)																
BIOL 3103: Plants and Civilization	Written Paper This term students presented their research as a poster for the whole class.	70% of students will score 70% or higher.	Given to all enrolled students in the semester.	29	This table summarizes student scores. <table border="1" style="margin-left: 20px;"> <thead> <tr> <th colspan="2">Score Distribution</th> </tr> </thead> <tbody> <tr> <td>0-49%</td> <td>0</td> </tr> <tr> <td>50-59%</td> <td>0</td> </tr> <tr> <td>60-69%</td> <td>0</td> </tr> <tr> <td>70-79%</td> <td>1</td> </tr> <tr> <td>80-89%</td> <td>13</td> </tr> <tr> <td>90-100%</td> <td>15</td> </tr> <tr> <td>Average:</td> <td>88.2%</td> </tr> </tbody> </table>	Score Distribution		0-49%	0	50-59%	0	60-69%	0	70-79%	1	80-89%	13	90-100%	15	Average:	88.2%	The average test score was 88%. 100% (29 of 29) of students scored $\geq 70\%$. Shown are the average test score and the percentage of students that met the standard for the last five years. 2019-20 88.2 100% 2018-19 85.9 100% 2017-18 95.1 100% 2016-17 87.3 100% 2015-16 86.6 100% Students have met the desired standard in every	Y
Score Distribution																							
0-49%	0																						
50-59%	0																						
60-69%	0																						
70-79%	1																						
80-89%	13																						
90-100%	15																						
Average:	88.2%																						

A. Course	B. Assessment Measures	C. Performance Standards	D. Sampling Methods	E. Sample Size (N)	F. Results	G. Conclusions	H. Performance Standards Met (Y/N)
						year that is has been assessed. This shows students are meeting the goal of effective written & visual communication.	

OUTCOME 4: Develop an individual perspective on the human experience, and demonstrate an understanding of diverse perspectives and values.

A. Course	B. Assessment Measures	C. Performance Standards	D. Sampling Methods	E. Sample Size (N)	F. Results	G. Conclusions	H. Performance Standards Met (Y/N)																
BIOL 3103: Plants and Civilization	Comprehensive Final Exam	70% of students will score 70% or higher.	Given to all enrolled students in the semester.	29	This table summarizes student scores. <table border="1"> <thead> <tr> <th>Score Distribution</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>0-49%</td> <td>0</td> </tr> <tr> <td>50-59%</td> <td>1</td> </tr> <tr> <td>60-69%</td> <td>0</td> </tr> <tr> <td>70-79%</td> <td>9</td> </tr> <tr> <td>80-89%</td> <td>13</td> </tr> <tr> <td>90-100%</td> <td>6</td> </tr> <tr> <td>Average:</td> <td>82.0%</td> </tr> </tbody> </table>	Score Distribution	Count	0-49%	0	50-59%	1	60-69%	0	70-79%	9	80-89%	13	90-100%	6	Average:	82.0%	The average test score was 82%. 97% (28 of 29) of students scored $\geq 70\%$. Shown are the average test score and the percentage of students that met the standard for the last five years. 2019-20 82.0 97% 2018-19 89.6 100% 2017-18 86.1 95% 2016-17 88.1 100% 2015-16 84.4 88% Students have met the desired standard in every year that is has been assessed. This shows students are meeting the goal of developing an understanding of the human experience.	Y
Score Distribution	Count																						
0-49%	0																						
50-59%	1																						
60-69%	0																						
70-79%	9																						
80-89%	13																						
90-100%	6																						
Average:	82.0%																						

OUTCOME 5: Demonstrate civic knowledge and engagement, ethical reasoning, and skills for lifelong learning.

A. Course	B. Assessment Measures	C. Performance Standards	D. Sampling Methods	E. Sample Size (N)	F. Results	G. Conclusions	H. Performance Standards Met (Y/N)
N/A							

PART 4

Proposed Instructional Changes Based on Conclusions Drawn from Evidence Presented Above

State any proposed instructional or assessment changes to be implemented for the next academic year. Explain the rationale for these changes and how they will impact student learning and other considerations, such as curriculum, degree plan, assessment process, or budget. If no changes are planned, simply state "No changes are planned."

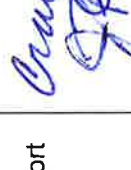



General Education Outcomes	Instructional or Assessment Changes	Rationale for Changes	Impact of Planned Changes on Student Learning and Other Considerations.
SLO #1 and #2	BIOL 1114. Dr. Overall wants to integrate online exercises from the McGraw-Hill CONNECT learning platform into the graded curriculum for her sections.	Freshman often struggle in lower level science courses. It is hoped this additional content will help students develop better science proficiency.	Studies of the effectiveness on digital learning platforms like CONNECT report greater student engagement, higher student confidence, greater course completion rates, and high grades.
SLO #1 and #2	BIOL 1134. Dr. Overall wants to integrate online exercises from the Cengage MINDTAP learning platform into the graded curriculum for her sections.	Freshman often struggle in lower level science courses. It is hoped this additional content will help students develop better science proficiency.	Studies of the effectiveness on digital learning platforms like MINDTAP report greater student engagement, higher student confidence, greater course completion rates, and high grades.
SLO #1 and #2	BIOL 1144. Dr. Overall wants to integrate online exercises from the Pearson MASTERING BIOLOGY learning platform into the graded curriculum for her sections.	Freshman often struggle in lower level science courses. It is hoped this additional content will help students develop better science proficiency.	Studies of the effectiveness on digital learning platforms like MASTERING BIOLOGY report greater student engagement, higher student confidence, greater course completion rates, and high grades.
SLO #1 and #2	Weekly lab meetings will be held for all lab instructors. Applies to	The department relies heavily on adjuncts for the lab component of	Weekly meetings with an established lab coordinator will help improve

General Education Outcomes	Instructional or Assessment Changes	Rationale for Changes	Impact of Planned Changes on Student Learning and Other Considerations.
SLO #1 and #2	lab sections of BIOL 1114/1144. Instructor manual is being compiled for assist adjuncts with lab set up, grading, and assessment. Applies to lab sections of BIOL 1114/1144.	BIOL 1114 and 1144. The total number of sections for these two courses combined typically exceeds 30. As many as six different instructors are needed to cover these sections, with around two-thirds covered by adjuncts. A typical academic year has 30+ sections of BIOL 1114/1144 that need to be covered. Most of these are taught by adjunct instructors. Consequently, in any given year, we of typically training 1-2 new adjuncts for this role. A manual to help new instructors will help address many of the common issues that these new employees may have.	consistency of content and rigor. A manual will help better prepare our adjuncts in their role.
SLO #1 and #2	Lab curriculum redeveloped to include more science literacy and computer skills. Applies to lab sections of BIOL 1114/1144.	How the institution addresses the OSHRE requirement for computer proficiency is currently in flux. As a result, the Dept of Biology is planning to more aggressively address these skills within our own courses.	Regular lab exercises incorporating computer-based skills should help promote computer proficiency.
SLO #1 and #2	Online lab sections are going to be made more standardized between instructors with assessment questions. Applies to lab sections of BIOL 1114/1144.	The department expects a growth in online instruction. Ensuring consistency of content and rigor between online and on-ground sections is needed.	Consistency of rigor and content across online and on-ground sections will ensure the students graduating with a biology degree will receive quality education regardless of mode of delivery.
SLO #1 and #2	Online lab sections are going to become hybridized with some take home labs that students can order and work at home. Applies to lab sections of BIOL 1114/1144.	The department expects a growth in online instruction. Ensuring consistency of content and rigor between online and on-ground sections is needed.	Consistency of rigor and content across online and on-ground sections will ensure the students graduating with a biology degree will receive quality education regardless of mode of delivery.



PART 6 (A & B)

Documentation of Faculty Participation and Review

A. Provide the names and signatures of all faculty members who contributed to this report and indicate their respective roles.

Faculty Members	Roles in the Assessment Process (e.g., collect data, analyze data, prepare report, review report, etc.)	Signatures
Full-time Faculty Craig Zimmermann	Provided data, analyzed data, prepared report	 5/28/20 28 May 2020
Jerry Bowen	Provided data and reviewed report	 28 May 2020
Mark Peaden	Provided data and reviewed report	Uduak Udoh via email
Uduak Udoh	Provided data and reviewed report	Lisa Overell via email
Lisa Overall	Provided data and reviewed report	Cheyanne Olson 5/28/20
Cheyanne Olson	Provided data and reviewed report	Jae-Ho Kim 5/29/2020
Jae-Ho Kim	Reviewed report	
Jin Seo	Reviewed report	 5/28/20
Adjunct Faculty	Provided data	
Janette Tuckey	Provided data	
Rance Kingfisher	Provided data	
Paige Hankins	Provided data	
Gifty Benson	Provided data	

B. Reviewed by:

Titles	Names	Signatures	Date
Department Head		Jerry Bowen	28 May 2020
Dean	Keith Martin		6/3/2020