### Assessment of Course Student Learning Outcomes

<table>
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<tr>
<th>Gen Ed SLOs Assessed</th>
<th>Degree of Certificate SLOs Assessed</th>
<th>Course Level SLOs Assessed</th>
<th>Assessment (Performance) Tasks &amp; Success Criteria</th>
<th>Assessment Results &amp; Analysis*</th>
<th>Action(s) Proposed</th>
<th>Budget/Resources Implications</th>
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<td>Which align with the degree or certificate?</td>
<td>Which align with the course level SLO(s) being measured?</td>
<td>Which are being measured in the assessment?</td>
<td>• What do students have to do to show achievement of the SLOs?</td>
<td>• What strengths did the assessment identify?</td>
<td>• What changes, if any, do you plan to make in your material or instructional approach in response to the results of the assessment and your analysis?</td>
<td>• How much will your proposed actions cost the department or college?</td>
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<td>I, II, III, IV, VI, X</td>
<td>AA</td>
<td>1. Be able to use the scientific method to answer scientific questions.</td>
<td>Students need to answer the questions 75% correct. <strong>Exam 1:</strong> 3. In an experiment where one group receives a treatment and the other group doesn’t, the one that receives the treatment is called the: A) Biased group B) Random group C) Control group D) Experimental group 4. An educated guess is an A) Theory B) Hypothesis C) Study D) Law</td>
<td>Students received 65% correct. This did not meet the benchmark. Students study habits need to be strengthened.</td>
<td>I have made a jeopardy game to use for exam review. My belief is that students are afraid to ask questions or that they put little time in studying. A game that tests their knowledge before an exam may get them to realize their deficiencies and to increase their study.</td>
<td><em>Attach artifacts: summary of results, sample test, rubric, presentations, or relevant materials used to assess the SLOs</em></td>
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<td>I, II, III, IV, VI, X</td>
<td>2. Discuss the major chemical elements found in the human body and describe the different ways in which these elements combine to form molecules and compounds.</td>
<td>Students need to answer the question 75% correct. <strong>Exam 1</strong> 14. Which of the following would be regarded as an organic molecule? a. H₂O b. NaCl</td>
<td>Students received 75% correct.</td>
<td>No additional changes are necessary.</td>
<td>No funds are necessary</td>
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*No funds are necessary.*
3. Understand the functions of cellular organelles, and be able to trace the path of protein manufacture in the cell.

Students need to answer the questions 75% correct.

Exam 1
20. Respiration center of the cell.
A. Ribosomes
B. Endoplasmic reticulum
C. Lysozyme
D. Mitochondria
E. Golgi apparatus

Exam 2
50. Below is a list of four stages in the synthesis of a protein from the DNA code.
1. The base sequence on DNA is transcribed.
2. Anticodons on transfer RNA pair with codons on messenger RNA.
3. Messenger RNA leaves the nucleus.
4. Peptide bonds form between adjacent amino acids.
Which of the following is the correct sequence of these stages, from first to last?
A. 4, 2, 1, 3
B. 3, 2, 1, 4
C. 1, 3, 2, 4
D. 2, 1, 3, 4

Students received 55% correct. Students had little difficulty with questions 20; however, question 50 is more challenging. Students will make a concept map of protein synthesis as well as define key terms and turn in for a grade. No funds are necessary.
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<th>I, II, III, IV, VI, X</th>
<th>4. Compare and contrast the physical, chemical, and biological factors governing the transport materials across the cell membrane.</th>
<th>Students need to answer the question 75% correct.</th>
<th>Students received 80% correct.</th>
<th>No additional changes are necessary.</th>
<th>No funds are necessary</th>
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<td>5. Discuss the link between cells and tissues and describe how tissue structure determines its suitability for secretion, absorption, support, or protection.</td>
<td>Students need to answer the questions 75% correct.</td>
<td>Students received 65% correct.</td>
<td>No additional changes are necessary.</td>
<td>No funds are necessary</td>
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<td>6. Describe the anatomy and function of the major organ systems of the human body.</td>
<td>Students need to answer the questions 75% correct.</td>
<td>Students received 70% correct.</td>
<td>No additional changes are necessary.</td>
<td>No funds are necessary</td>
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<td>7. Discuss how negative feedback maintains homeostasis in each of the above body systems. Also, be able to explain how disease and disorders disrupt the homeostasis of each of the above body systems.</td>
<td>Students need to answer the questions 75% correct.</td>
<td>Students received 75% correct.</td>
<td>No additional changes are necessary.</td>
<td>No funds are necessary</td>
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example from the list below that operates by positive feedback. 
A. Blood pressure that has dropped too low is caused to increase. 
B. Oxytocin causes the uterus to contract, which causes more oxytocin to be produced. 
C. Maintenance of a constant body temperature is accomplished through sweating or shivering. 
D. Regulation of glucose levels in the blood requires the actions of two pancreatic hormones, insulin and glucagon.