

COURSE SLO ASSESSMENT REPORT, SCC

Department: Biology

Course: Biol-139 Health Microbiology

Year: 2013

Semester: Summer

1) Outcome to be assessed	2) Means of assessment and criteria of success	3) Summary of data collected	4) Analysis of data	5) Plan of action/what to do next
<p>Demonstrate a coherent understanding of the diversity of microorganisms and their role in the biosphere.</p>	<p>Students were asked an open-ended, essay-style question on both their first exam and their final exam, and their responses were recorded.</p> <p>The question was worded the same on both exams: Discuss the diversity of microorganisms and their role in the biosphere.</p> <p>Rubric used to score unknown reports. The expectation is that greater than 70% of the students will be scored as successfully meeting the expectations.</p>	<p>13/24 (54%) students demonstrated a coherent (cohesive) understanding of microorganisms and their role in the biosphere at the beginning of the term.</p> <p>16/24 (67%) students demonstrated a coherent (cohesive) understanding of microorganisms and their role in the biosphere at the end of the term.</p>	<p>Of the 24 students analyzed, many have an understanding of the role of microorganisms in the biosphere, as demonstrated by the increase in the number of students who answered accurately over the course of the term. However, the students did not meet the expectation that greater than 70% of the students will be scored as successfully meeting the expectations.</p>	<p>For the future, this question should be asked of the students, but should be asked for credit. About 10% of the students did not answer this particular question at all, likely because it was extra credit. This likely skewed the results. Additionally, after the students are required to attempt an answer, I will reevaluate if the target is being met or not.</p>

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<p>Employ the principles of the scientific method to both laboratory and conventional investigations.</p>	<p>Students were asked an open-ended, essay-style question on both their first exam and their final exam, and their responses were recorded.</p> <p>The question was worded the same on both exams: How are the principles of the scientific method critical to both laboratory and conventional investigations?</p> <p>Rubric used to score unknown reports. The expectation is that greater than 70% of the students will be scored as successfully meeting the expectations.</p>	<p>9/24 (38%) students demonstrated a coherent (cohesive) understanding of the principles of the scientific method at the beginning of the term.</p> <p>15/24 (63%) students demonstrated a coherent (cohesive) understanding of the principles of the scientific method at the end of the term.</p>	<p>Of the 24 students analyzed, many of the students understand the role of microorganisms in the biosphere, as demonstrated by the increase in the number of students who answered accurately over the course of the term. However, the students did not meet the expectation that greater than 70% of the students will be scored as successfully meeting the expectations.</p>	<p>For the future, this question should be asked of the students, but should be asked for credit. About 10% of the students did not answer this particular question at all, likely because it was extra credit. This likely skewed the results. Additionally, after the students are required to attempt an answer, I will reevaluate if the target is being met or not.</p>

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<p>Conduct laboratory investigations according to given experimental procedure, collect and analyze resulting experimental data, and formulate valid conclusions based on the results.</p>	<p>Students' laboratory investigational skills were evaluated through the correct identification of two unknown bacterial species (unknown to the student).</p> <p>Rubric used to score unknown reports. The expectation is that greater than 70% of the students will be scored as successfully meeting the expectations.</p>	<p>11/24 (46%) students interpreted ALL the experimental results correctly.</p> <p>24/24 (100%) documented all necessary evidence for their conclusion.</p>	<p>21/24 (88%) students correctly identified one or two organisms.</p> <p>13/24 (54%) students correctly identified only one organism.</p> <p>8/24 (25%) students correctly identified both organisms.</p> <p>7/24 (29%) students made only minor errors in providing evidence to support their conclusions.</p>	<p>This project is almost ideal in engaging students in the scientific process. It will continue to be used.</p>