

GBC Class/Course Assessment Report

Course Prefix, Number, and Title: BIOL100 (General Biology for Non-Majors) – all online course
 Department: Science
 Section Number(s): 1001
 Instructor: Daniel Bergey

Academic Year: 2021-2022
 Semester: SPR2022
 Is this a GenEd class? Yes X No

- Complete and submit your assessment report electronically to the Dean of Arts & Sciences by May 31st. As needed, please attach supporting documents and/or a narrative description of the assessment activities. You may use as many or as few outcomes as necessary.

Learning Outcomes			
Class/Course Outcomes	Assessment Measures	Assessment Results	Any Changes Made as a Result of Assessment
In the boxes below, summarize the outcomes assessed in your class or course during the last year. If this is a GenEd class, include the appropriate GenEd objectives.	In the boxes below, summarize the methods used to assess course outcomes during the last year. Include the criterion you'll use to judge whether or not students have achieved the expected outcome.	In the boxes below, summarize the results of your assessment activities during the last year. Include your judgment as to whether or not the criterion for student achievement has been met.	In the boxes below, summarize how you plan to use the results to improve student learning.
Outcome #1: <ul style="list-style-type: none"> Be familiar with the basic concepts of the scientific process and the nature of biology while gaining an appreciation for how science is conducted. Be able to critique and analyze claims in a scientific context. 	Assessment Measure: <ul style="list-style-type: none"> Weekly quizzes 2 mid-term exams Homework Course website access Criterion for achievement: <ul style="list-style-type: none"> Passing quizzes, exams, and homework with 70% minimum score 	Results: <ul style="list-style-type: none"> 11/19 students Criterion Met: Yes/No <ul style="list-style-type: none"> NO 	Action Plan: <ul style="list-style-type: none"> Make practice problem sets focused on this topic area Include an additional graded homework assignment.
Outcome #2: <ul style="list-style-type: none"> Understand the basic structure of atoms and molecules, the properties of water, and the major macromolecules necessary in living systems. 	Assessment Measure: <ul style="list-style-type: none"> Weekly quizzes Exams Homework Criterion for achievement: <ul style="list-style-type: none"> Passing quizzes with 70% minimum score 	Results: <ul style="list-style-type: none"> 11/19 students Criterion Met: Yes/No <ul style="list-style-type: none"> NO 	Action Plan: <ul style="list-style-type: none"> No adjustments anticipated Practice topic tests

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<p>Outcome #3:</p> <ul style="list-style-type: none"> Understand the basic structure and function of cells and important differences between animal and plant cells. Describe the nature of metabolism including photosynthesis and cellular respiration and its importance to living organisms. 	<p>Assessment Measure:</p> <ul style="list-style-type: none"> Weekly quizzes Exams Homework <p>Criterion for achievement:</p> <ul style="list-style-type: none"> Passing quizzes with 70% minimum score 	<p>Results:</p> <ul style="list-style-type: none"> 11/19 students <p>Criterion Met: Yes/No</p> <ul style="list-style-type: none"> NO 	<p>Action Plan:</p> <ul style="list-style-type: none"> Use of additional in-class worked examples Include one additional graded homework assignments. Include another short, written topic report/review.
<p>Outcome #5:</p> <ul style="list-style-type: none"> Understand the nature of the evolutionary theory and explain the basic concepts of natural selection. 	<p>Assessment Measure:</p> <ul style="list-style-type: none"> Weekly quizzes Exams Homework <p>Criterion for achievement:</p> <p>Passing quizzes, exams, and homework with 70% minimum score</p>	<p>Results:</p> <ul style="list-style-type: none"> 10/19 students <p>Criterion Met: Yes/No</p> <ul style="list-style-type: none"> NO 	<p>Action Plan:</p> <ul style="list-style-type: none"> Include an additional brief graded report.
<h3>General Ed-Specific Outcomes</h3>			
<p>Outcome #1 (GenEd):</p> <ul style="list-style-type: none"> Communication Skills 	<p>Assessment Measure:</p> <ul style="list-style-type: none"> Weekly quizzes Exams Homework; problem sets <p>Criterion for achievement:</p> <ul style="list-style-type: none"> Passing quizzes, exams, and homework with 70% minimum score 	<p>Results:</p> <ul style="list-style-type: none"> 12/19 students <p>Criterion Met: Yes/No</p> <ul style="list-style-type: none"> NO 	<p>Action Plan:</p> <ul style="list-style-type: none"> Add Discussion Session or another Written Report Online Homework
<p>Outcome #2 (GenEd):</p> <ul style="list-style-type: none"> Critical Thinking (quantitative) 	<p>Assessment Measure:</p> <ul style="list-style-type: none"> Weekly quizzes Exams Homework; problem sets <p>Criterion for achievement:</p> <ul style="list-style-type: none"> Passing quizzes, exams, and homework with 70% minimum score 	<p>Results:</p> <ul style="list-style-type: none"> 14/19 students <p>Criterion Met: Yes/No</p> <ul style="list-style-type: none"> YES 	<p>Action Plan:</p> <ul style="list-style-type: none"> Specifically Targeted Online Homework Class Review Discussion More Practice Review Problems

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<p>Outcome # (GenEd):</p> <ul style="list-style-type: none"> Critical Thinking (scientific understanding) 	<p>Assessment Measure:</p> <ul style="list-style-type: none"> Weekly quizzes Exams Homework; problem sets <p>Criterion for achievement:</p> <ul style="list-style-type: none"> Passing quizzes and exams with 70% minimum score 	<p>Results:</p> <ul style="list-style-type: none"> 9/19 students <p>Criterion Met: Yes/No</p> <ul style="list-style-type: none"> NO 	<p>Action Plan:</p> <ul style="list-style-type: none"> Specifically Targeted Online Homework Class Review Discussion More Practice Review Problems
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Notes & Comments:

(1) BIOL100 is a general survey course for non-science majors, which was included this an alternative Health Science pre-req to substitute for the much more rigorous BIOL190 course. Not surprisingly, enrollment in BIOL100 has increased since the pre-req revision, and we had to add a third section for BIOL100 this semester (SPR2022). BIOL100 was designed for non-majors, and is an important and relevant course for these students because it introduces non-science majors to fundamental biological processes characterizing the major life forms. BIOL100 also provides an opportunity to help students develop basic science and critical thinking skills to help recognize valid information and filter out the immense amount of mis-information and dis-information we are all subjected to every day. An emphasis on critical thinking and objective assessment of information is a key component of every course I teach, including majors, and non-majors, courses.

(2) Although BIOL100 is an online only course, I record and posted Zoom lectures to reinforce content in selected areas that are typically more difficult for students. Students expressed gratitude for these supplementary lectures, as well as the Practice Tests I designed and posted a week before each major Exam covering important topic areas. Practice tests included sample questions covering some key concepts and topics likely to be covered on the graded exams. Some questions were similar, but not identical, to questions that may be on the graded exams. I found the practice tests seemed to alleviate a lot of potential student anxiety and stress before major exams, and provided another helpful study aid for student preparation. Because of the positive student response and feedback, I will be making and posting lecture recordings as a course enhancement for all of my future BIOL100 courses.

(3) Eight of 19 students earned “F” grades in the course. Five of the “F” grades were assessed because these students simply did not bother to turn in assignments, and missed several Quizzes or Exams. These five students also did not take the Final Exam. The other 3 students with “F” grades either missed Quizzes, Exams, or HW assignments, and scored very low on other Exams, Quizzes, or assignments. Not surprisingly, every student that earned an “F” in the course accessed the course website only intermittently. The importance of regularly accessing the course website is clearly noted in the syllabus, and emphasized several times during the semester in posted announcements. Only one student responded to my email queries seeking input on where these students were struggling, and indicated my willingness to meet anytime (via Zoom, etc.) and answer questions, clarify content, etc.

(4) I have never had such a high percentage of students put so little effort into a class, and I’ve never had so many “F” grades in any class I have taught, here at GBC or elsewhere. Of the 11 students that did not earn an “F” grade, there 2 “As” 5 “Bs”, 3 “Cs”, 1 “D”. Without considering percentages from the 8 students that earned “F” grades, the overall class average would have been between just under 83%.

Respectfully submitted 5/22 - DBergey

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I have reviewed this report:

Department Chair

Date _____

Dean

Date _____

Vice President of Academic Affairs and Student Services

Date _____