GBC Class/Course Assessment Report

Course Prefix, Number, and Title: ***CHEM100 (Molecules & Life in Modern World)***
Section Number(s): ***1001***
Department: Science
Instructor: ***Daniel Bergey***

Academic Year: ***2019-2020***
Semester: ***SPR2020***
Is this a GenEd class? Yes___ No_X__

☐ **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.**

Class/Course Outcomes	Assessment Measures	Assessment Results	Outcome Results Analysis
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 judgement as to whether or not the criterion for student achievement has been met.	In the boxes below, please reflect on this outcome's results, and summarize how you plan to use the results to improve student learning.
Outcome #1: • *Discuss the states and properties of matter*	Assessment Measure: • *Quizzes, Exams, Homework* Criterion for achievement: • *70% of class with 70% or higher*	Results: • *21/21* Criterion Met: • *Yes*	1. Results Analysis: • *Students had little problem grasping this essential content* 2. Action Plan: • *None required*
Outcome #2: • *Describe the basic structure of atoms and ions, and relate them to their location in the Periodic Table, their charge, and the number of fundamental particles*.	Assessment Measure: • *Quizzes, Exams, Homework* Criterion for achievement: • *70% of class with 70% or higher*	Results: • *19/21* Criterion Met: • *Yes*	1. Results Analysis: • *Most students readily mastered these fundamental skills and general content* 2. Action Plan: • *None required*

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Outcome #3: • *Discuss the basics of chemical bonding including polarity of diatomic molecules.*	Assessment Measure: • *Quizzes, Exams, Homework* Criterion for achievement: • *70% of class with 70% or higher*	Results: • *20/21* Criterion Met: • *Yes*	1. Results Analysis: 2. Action Plan: • *None required*
Outcome #4: • *Scientific Reasoning* • *Proficiency in the use of scientific terminology.* • *Effectively interpret and apply scientific principles.* • *Utilize the scientific method to arrive at informed conclusions.*	Assessment Measure: • *Quizzes, Exams, Practice problems* Criterion for achievement: • *70% of class with 70% or higher*	Results: • *17/21* Criterion Met: • *Yes*	1. Results Analysis: 2. Action Plan: • *Include additional practice quiz and worksheet*
Outcome #5: • *Data Interpretation and Generation* • *Effectively apply mathematical principles and quantitative methods to collect and analyze scientific data.* • *Effectively read and interpret graphs and data to arrive at informed conclusions.*	Assessment Measure: • *Quizzes, Exams, Homework* Criterion for achievement: • *70% of class with 70% or higher*	Results: • *18/21* Criterion Met: • *Yes*	1. Results Analysis: 2. Action Plan: • *None required*

Notes:

(1) Not surprisingly, the Covid-19 adjustments had little impact on this course since the course is always an "all on-line" course. This semester, I did receive less day-to-day student email via WebCampus overall. Although I have not carefully reviewed the student evaluations for this course yet, judging from student comments and email interaction during the semester, most students seemed to have fewer concerns, and less anxiety, with the course than in previous semesters. I attribute this apparent decrease in student anxiety to two factors: (1) my efforts to anticipate students concerns and make very regular information posts, reminders, updates, etc. on the course website to assure the students that I was engaged daily with the course, and (2) to ensure all lecture notes, assignments, reading, etc. were posted on the course website several days before the relevant chapters were to be formally covered, according to the syllabus schedule. Making course content available well in advance also seemed to relieve potential anxiety for those students that are initially somewhat

intimidated by the course due the necessary emphasis on basic math applications and problem solving. I will continue the strategy of ensuring content is available well in advance of formally scheduled coverage dates in all future courses.

(2) Other than a slightly higher overall final course percentage, I did not see a significant change in the student performance from last semester. I teach CHEM100 every semester, and consistently find that over 90% of my students are pursuing a career in a health sciences-related profession (e.g., nursing, radiology, physical therapy). Students pursuing another biological sciences-related degree often take this course as a preparatory introduction to chemical principles before going on to take the more rigorous CHEM121 (majors chemistry). This is a valuable and relevant course for our students, and I greatly enjoy teaching it.

(3) Lastly, I was very happy to see all students finished the course, and no student failed.

I have reviewed this report:

_____ _____

Department Chair Dean

Date_____ Date_____

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Vice President of Academic Affairs and Student Services

Date_____