

SLO Performance - Human Biology

Program: Biology

Date: 09/12/2018

Course Group: BC Biology Major AS Human Biology

Emphasis

Terms: Spring 2018, Fall 2017

CHEMB1B: General Chemistry and Chemical Analysis

1. Upon completion the student will be able to: relate the fundamental importance of chemistry and chemical safety to other disciplines, their future career, current events, and to their everyday life.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

2. Upon completion the student will be able to: relate the observable properties of matter to the fundamental building blocks of matter, how these form larger structures, how they interact, and the role that energy plays in guiding matter's behavior. This includes the application of these chemical concepts to problem solving, and relating properties to atomic and molecular structure, moles and all levels of bonding.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	1	1.25%	33	41.25%	32	40.00%	14	17.50%	80	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	1	1.25%	33	41.25%	32	40.00%	14	17.50%	80	100.00%

3. Upon completion the student will be able to: make and report accurate observations using the appropriate systems of measurement. They should be able to make reasonably accurate/ precise measurements and be able to use unit conversions and formulas in subsequent mathematical calculations.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	11	13.75%	37	46.25%	19	23.75%	13	16.25%	80	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	11	13.75%	37	46.25%	19	23.75%	13	16.25%	80	100.00%

4. Upon completion the student will be able to: develop and apply logical thinking processes in learning and problem solving related to chemistry. They should demonstrate the ability to analyze chemical problems, formulate, calculate, and report mathematical manipulations related to those problems. This includes designing and organizing logical problem solving methodologies that link observations with fundamental chemical concepts and conclusions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

5. Upon completion the student will be able to: identify/characterize several standard chemical systems and behaviors. Example systems are general thermodynamics, kinetics, general equilibria, acid-base equilibrium, pH control via buffers, solubility equilibria, electrochemical processes, and radioactivity.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

6. Upon completion the student will be able to: perform standard, fundamental calculations which quantify/characterize the behaviors of such systems mentioned above. Examples include the mathematical interpretation of kinetics measurements and Le Chatelier's principle regarding stressed equilibria, expected cell EMF's under various conditions, the mathematical calculations showing how certain ions are separable through pH manipulation, and determining the feasibility of a reaction based on thermodynamic principles.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

7. Upon completion the student will be able to: describe the chemistry of various main-group elements and the transition metals, and show an introductory level of understanding of organic chemistry. Recognize the various uses of different elements in materials, manufacturing and other scientific areas (e.g. organic chemistry, biological sciences) related to their careers and community .

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

8. Upon completion the student will be able to: have developed the following skills and abilities primarily from laboratory activities: a. have developed problem solving skills and will be able to restate the problem in his/her own words, will develop problem solving approaches, will be able to evaluate the data used to solve the problem, and will be able to evaluate the solution generated. b. have the ability to manipulate and interpret data and to organize data collected from laboratory into meaningful tables/charts, produce a graph of data and predict an outcome, and to be able to identify data points that are outliers. c. have developed manipulative skills and will demonstrate through proper use of common laboratory equipment such as balances, centrifuges, ovens, burets, pipets, and glassware. Will demonstrate proper use of laboratory instruments such as pH meters, spectrophotometers, computers where required, and other such items. Will demonstrate proper transfer and separation techniques. d. apply scientific reasoning skills, construct a testable hypothesis, use data to make a logical deduction, construct a scientific argument, and derive a generalization from a specific data set. e. understand important course concepts, explain the meaning of pertinent concepts, apply concepts to novel situations and relate and apply concept to life situations.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	12	7.50%	70	43.75%	51	31.87%	27	16.88%	160	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	12	7.50%	70	43.75%	51	31.87%	27	16.88%	160	100.00%

BIOLB16: General Microbiology

Upon completion the student will be able to: Compare and contrast the characteristics for various microbes with regards to infections, treatment, and control. (This includes prions, viruses, bacteria, protozoans, and multicellular parasites.)

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Explain the dynamics of commensal, opportunistic, and pathological relationships particularly between microbes and humans.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Evaluate and apply the proper methods of microbial control necessary in sample scenarios or case studies.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Describe microbial metabolic pathways in general terms and specifically evaluate the implications for food production and human disease.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	52	67.53%	22	28.57%	3	3.90%	77	100.00%
Totals	0	0.00%	52	67.53%	22	28.57%	3	3.90%	77	100.00%

Summarize basic bacterial genetic principles and analyze consequences of mutation and genetic recombination.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	70	90.91%	7	9.09%	0	0.00%	77	100.00%
Totals	0	0.00%	70	90.91%	7	9.09%	0	0.00%	77	100.00%

Articulate and diagram the role of the immune system in maintaining homeostasis, challenging infections, and fighting cancer.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Apply the scientific method by stating a question; researching the topic; determining appropriate tests; performing tests; collecting, analyzing, and presenting data; and finally proposing new questions about the topic.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	22	27.16%	48	59.26%	11	13.58%	81	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	22	27.16%	48	59.26%	11	13.58%	81	100.00%

Correctly perform microbiologic lab skills and safety practices which extend to relevant situations in the student's homes.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Retrieve, evaluate, and use contemporary microbiologic information.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Spring 2018	0	0.00%	46	56.10%	8	9.76%	28	34.15%	82	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	46	56.10%	8	9.76%	28	34.15%	82	100.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Spring 2018	0	0.00%	68	41.72%	56	34.36%	39	23.93%	163	100.00%
Fall 2017	0	0.00%	122	79.22%	29	18.83%	3	1.95%	154	100.00%
Totals	0	0.00%	190	59.94%	85	26.81%	42	13.25%	317	100.00%

CHEMB2A: Introductory General Chemistry

Upon completion the student will be able to: Understand and explain the atomic and molecular basis for the properties of everyday materials. Explain the periodicity of the various properties of the elements using the periodic table.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Understand the concept of oxidation-reduction and be able to apply the activity series to predict simple single displacement reactions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Be able to recognize/identify chemistry happening in everyday life.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Determine the electronic structure of an atom and understand the theoretical basis for the arrangement of electrons and the basis for the types of formulas or compounds formed. Explain the formation of cations and anions from the electronic structure.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Determine the nature of chemical bonding of atoms in molecules and ions using the periodic table.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Relate the chemical and physical properties of substances to molecular structure, chemical bonding, and intermolecular interactions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Understand and explain the states of matter and the transitions matter undergoes and determine energy required for a particular transition.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Understand reactions by identifying reactants and products, recognizing the type of reaction, balancing the equation for a reaction and making calculations from the equation for the purpose of identifying the limiting reactant, product produced or reactant required.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Understand the concept of equilibrium and how it is applied in a chemical reaction and in explaining pH or pOH.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Able to predict the formula of a simple inorganic compound and to identify the compound by name using either the Stock or Classical method. Determine the empirical formula using laboratory data.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Identify basic laboratory equipment and know it's function or use. State a solvable problem, state a hypothesis, and design an experiment to solve the problem.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

BIOLB21: Special Projects in Biology

Upon completion of the course, the student will be able to: Collect, assemble, maintain and organize biological collections

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Select and evaluate biological materials needed for laboratory preparation

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Analyze a biological topic or concept which the student judges to be difficult for other students to learn or understand. The student must create, organize, prepare and present to students an activity designed to help them grasp the biological topic

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Design and organize a pre-exam review session including: examining topics to distinguish importance, creating review questions &/or activities and suggesting effective study techniques.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

BIOLB32: Human Anatomy and Physiology I

Describe and distinguish various roles of major classes of biomolecules in living cells.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Spring 2018	39	15.98%	0	0.00%	154	63.11%	51	20.90%	244	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	39	15.98%	0	0.00%	154	63.11%	51	20.90%	244	100.00%

Demonstrate an understanding of how homeostasis is maintained in the body.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Spring 2018	39	15.98%	0	0.00%	193	79.10%	12	4.92%	244	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	39	15.98%	0	0.00%	193	79.10%	12	4.92%	244	100.00%

Analyze experimental data to demonstrate physiological principles.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Spring 2018	39	15.98%	0	0.00%	151	61.89%	54	22.13%	244	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	39	15.98%	0	0.00%	151	61.89%	54	22.13%	244	100.00%

Demonstrate an understanding of the scientific method, experimental design, and the philosophy of science. Apply the scientific method and philosophy of science by designing components of and carrying out physiological experiments.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Spring 2018	39	15.98%	0	0.00%	163	66.80%	42	17.21%	244	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	39	15.98%	0	0.00%	163	66.80%	42	17.21%	244	100.00%

Describe key structural features of different human cells and major tissue types.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	39	15.98%	0	0.00%	126	51.64%	79	32.38%	244	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	39	15.98%	0	0.00%	126	51.64%	79	32.38%	244	100.00%

Identify and describe the anatomy of the systems of the human body.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	39	15.98%	0	0.00%	137	56.15%	68	27.87%	244	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	39	15.98%	0	0.00%	137	56.15%	68	27.87%	244	100.00%

Identify key functions of major organ systems and the physiological mechanisms underlying their operation.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	39	15.98%	0	0.00%	101	41.39%	104	42.62%	244	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	39	15.98%	0	0.00%	101	41.39%	104	42.62%	244	100.00%

Relate structure and function at the cellular through system levels of organization of human body systems

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	39	16.18%	0	0.00%	162	67.22%	40	16.60%	241	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	39	16.18%	0	0.00%	162	67.22%	40	16.60%	241	100.00%

Describe structural or anatomical changes that occur in disease, injury or aging of the human body systems.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	39	15.98%	0	0.00%	33	13.52%	172	70.49%	244	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	39	15.98%	0	0.00%	33	13.52%	172	70.49%	244	100.00%

Demonstrate knowledge of metabolic and physiological disorders of the major organ systems.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	39	16.12%	0	0.00%	138	57.02%	65	26.86%	242	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	39	16.12%	0	0.00%	138	57.02%	65	26.86%	242	100.00%

Describe key functional features of different types of human cells and how they communicate.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	39	15.98%	0	0.00%	175	71.72%	30	12.30%	244	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	39	15.98%	0	0.00%	175	71.72%	30	12.30%	244	100.00%

Demonstrate an understanding of how organ systems of the body are integrated and regulated.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	39	15.98%	0	0.00%	134	54.92%	71	29.10%	244	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	39	15.98%	0	0.00%	134	54.92%	71	29.10%	244	100.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	468	16.01%	0	0.00%	1667	57.03%	788	26.96%	2923	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	468	16.01%	0	0.00%	1667	57.03%	788	26.96%	2923	100.00%

MEDSB60: Medical Terminology

Upon completion of the course, the student will be able to recognize and identify basic word parts relating to medical terminology.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Analyze word parts to define and build medical terms.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Discuss the anatomy and function of each body system relating to medical terminology.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Identify and define common pathological conditions including signs and symptoms related to medical terminology.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Demonstrate proficiency in the spoken and written language of medicine

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

BIOLB33: Human Anatomy and Physiology II

Describe and distinguish various roles of major classes of biomolecules in living cells.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	44	60.27%	29	39.73%	73	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	44	60.27%	29	39.73%	73	100.00%

Demonstrate an understanding of how homeostasis is maintained in the body.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	70	95.89%	3	4.11%	73	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	70	95.89%	3	4.11%	73	100.00%

Analyze experimental data to demonstrate physiological principles.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	58	79.45%	15	20.55%	73	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	58	79.45%	15	20.55%	73	100.00%

Demonstrate an understanding of the scientific method, experimental design, and the philosophy of science. Apply the scientific method and philosophy of science by designing components of and carrying out physiological experiments.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	1	2.17%	0	0.00%	45	97.83%	0	0.00%	46	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	1	2.17%	0	0.00%	45	97.83%	0	0.00%	46	100.00%

Describe key structural features of different human cell and major tissue types.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	58	79.45%	15	20.55%	73	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	58	79.45%	15	20.55%	73	100.00%

Identify and describe the anatomy of the systems of the human body.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	61	83.56%	12	16.44%	73	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	61	83.56%	12	16.44%	73	100.00%

Identify key functions of major organ systems and the physiological mechanisms underlying their operation.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	61	83.56%	12	16.44%	73	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	61	83.56%	12	16.44%	73	100.00%

Relate structure and function at the cellular through system levels of organization of human body systems

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	46	63.01%	27	36.99%	73	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	46	63.01%	27	36.99%	73	100.00%

Describe structural or anatomical changes that occur in disease, injury or aging of the human body systems.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	55	75.34%	18	24.66%	73	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	55	75.34%	18	24.66%	73	100.00%

Demonstrate knowledge of metabolic and physiological disorders of the major organ systems.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	35	47.95%	38	52.05%	73	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	35	47.95%	38	52.05%	73	100.00%

Describe key functional features of different types of human cells and how they communicate.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	47	64.38%	26	35.62%	73	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	47	64.38%	26	35.62%	73	100.00%

Demonstrate an understanding of how organ systems of the body are integrated and regulated.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	37	50.68%	36	49.32%	73	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	37	50.68%	36	49.32%	73	100.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	1	0.12%	0	0.00%	617	72.67%	231	27.21%	849	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	1	0.12%	0	0.00%	617	72.67%	231	27.21%	849	100.00%

CHEMB11: Introduction to General, Organic, and Biochemistry

Upon completion the student will be able to: Use dimensional (factor label) analysis as a problem solving tool.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Perform accurate observations of physical and chemical changes during lab experimentation.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Illustrate how matter and energy are related, in particular the role that energy plays changing the physical state of matter and chemical reactions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Describe the model of an atom and how atoms bond together to form larger structures such as molecules or crystal lattices. Based on periodic atomic properties, explain the relative macroscopic physical properties of matter.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Explain various observations on test, quizzes, and/or lab reports. Students should be able to assess their observations based on atomic/molecular structures and on the absorption or release of energy.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	21	12.21%	11	6.40%	76	44.19%	64	37.21%	172	100.00%
Fall 2017	8	16.67%	0	0.00%	10	20.83%	30	62.50%	48	100.00%
Totals	29	13.18%	11	5.00%	86	39.09%	94	42.73%	220	100.00%

Upon completion the student will be able to: Identify and explain several common chemical systems and behaviors such as electrolytes, buffers, and osmosis.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	21	14.29%	16	10.88%	81	55.10%	29	19.73%	147	100.00%
Fall 2017	8	16.67%	0	0.00%	23	47.92%	17	35.42%	48	100.00%
Totals	29	14.87%	16	8.21%	104	53.33%	46	23.59%	195	100.00%

Upon completion the student will be able to: Characterize and identify several chemical reactions that are frequently encountered in biochemistry and physiology, such as: 1. Oxidation/reduction reactions 2. Acid/base reactions 3. Dehydration reactions 4. Hydrolysis reactions 5. Addition reactions

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	20	80.00%	5	20.00%	25	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	20	80.00%	5	20.00%	25	100.00%

Upon completion the student will be able to: Recognize from the name or structure organic functional groups and associate these groups with their chemical and physical properties.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Identify and name the chemical structure of lipids, carbohydrates, and proteins. Describe the functions of these classes of compounds and how these compounds are broken down in the processes of metabolism to produce energy in the body.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	42	12.21%	27	7.85%	177	51.45%	98	28.49%	344	100.00%
Fall 2017	16	16.67%	0	0.00%	33	34.38%	47	48.96%	96	100.00%
Totals	58	13.18%	27	6.14%	210	47.73%	145	32.95%	440	100.00%

NUTRB10: Elementary Nutrition

1. Upon completion of the course the student will be able to: The student will evaluate his/her own nutrition and food intake and design individualized healthy eating plans by utilizing the Dietary Guidelines, the Food Guide Pyramid and the Exchange List system. Consideration of the scientific principles of energy balance and disease prevention must be included.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

2. Upon completion of the course the student will be able to: The student will utilize the scientific method to critically analyze and evaluate nutrition research, products, supplements and controversies.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

3. Upon completion of the course the student will be able to: The student will demonstrate an understanding of digestion, absorption, transportation and metabolism of nutrients in the body.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

4. Upon completion of the course the student will be able to: The student will understand the chemical classifications, functions, digestion, absorption, transportation, dietary sources and recommended intakes of the various types of carbohydrates, fats and proteins.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	3	50.00%	3	50.00%	6	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	3	50.00%	3	50.00%	6	100.00%

5. Upon completion of the course the student will be able to: The student will analyze the physiological functions of vitamins, minerals and water and identify the physical effects of deficiencies and toxicities.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	3	50.00%	2	33.33%	1	16.67%	6	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	3	50.00%	2	33.33%	1	16.67%	6	100.00%

6. Upon completion of the course the student will be able to: The student will demonstrate an understanding of the physiological role and impact of nutrition on individuals progressing through the various stages of the life cycle.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	3	25.00%	5	41.67%	4	33.33%	12	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	3	25.00%	5	41.67%	4	33.33%	12	100.00%

CHEMB1A: General Chemistry I

Upon completion the student will be able to: Practice safe and effective general laboratory skills, including the ability to: a. Recognize the limitations of physical measurements and application of appropriate rules for significant figures. b. Complete measurements in an accurate and precise manner. c. Effectively work with peers in a collegial environment.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Demonstrate proficiency in solving mathematical problems that require identifying key data (from lists, tables, experimental data, or graphs) and constructing correct formulas for unit conversions, ratios, and stoichiometry.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Use the atomic and kinetic theories of matter to explain macroscopic chemical and physical behavior.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	45	58.44%	19	24.68%	13	16.88%	77	100.00%
Totals	0	0.00%	45	58.44%	19	24.68%	13	16.88%	77	100.00%

Upon completion the student will be able to: Compare and contrast the details of ionic, covalent, and intermolecular bonding, and describe how energy changes are related to temperature, motion at the atomic level, and changes in chemical bonding.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Describe how energy changes are related to motion at the atomic level and the reorganization of matter found in chemical and physical changes.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	3	1.73%	56	32.37%	36	20.81%	78	45.09%	173	100.00%
Totals	3	1.73%	56	32.37%	36	20.81%	78	45.09%	173	100.00%

Upon completion the student will be able to: Design experiments and interpret data according to the scientific method. This includes the ability to: a. Define and follow the general scientific method. b. Formulate questions in order to evaluate a hypothesis. c. Design and conduct experiments to answer questions. d. Record, manipulate and evaluate the experimental data to reach conclusions. e. Correlate experimental results with appropriate theory.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	1	4.35%	12	52.17%	3	13.04%	7	30.43%	23	100.00%
Totals	1	4.35%	12	52.17%	3	13.04%	7	30.43%	23	100.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	4	1.47%	113	41.39%	58	21.25%	98	35.90%	273	100.00%
Totals	4	1.47%	113	41.39%	58	21.25%	98	35.90%	273	100.00%

Report Totals:

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2018	523	11.75%	168	3.77%	2573	57.81%	1187	26.67%	4451	100.00%
Fall 2017	20	3.82%	235	44.93%	120	22.94%	148	28.30%	523	100.00%
Totals	543	10.92%	403	8.10%	2693	54.14%	1335	26.84%	4974	100.00%