All levels SLOs achievement Biological Technology - Biological Laboratory Technology-Certificate of Achievement during CCC Fall 2012

SLO Achievement

SLO Text	SLO Level	Course Number	Fully Achieved	Partially Achieved	Failed to Achieve
The student will be able to analyze the fundamental features of inorganic chemistry as it applies to organic and biochemistry including measurement and mathematical interconversion of physical properties such as mass, volume, density, temperature, solution, concentrations.	C	CHEM-C110	66.67 %	12.00 %	21.33 %
The student will be able to correctly use scientific systems of measurement, scientific symbols, and chemistry vocabulary and to differentiate typical acid and base formulas and compare/contrast the behavior associated with acids and bases including the behavior of buffers.	C	CHEM-C110	70.67 %	1.33 %	28.00 %
The student will be able to manipulate laboratory equipment so that he or she will be able to perform basic chemical experiments and determinations.	C	CHEM-C110	70.67 %	4.00 %	25.33 %
Students will be able to distinguish various roles of four major classes of biomolecules in living cells, and to distinguish and construct key structural features and common reactions of these classes of biomolecules.	C	CHEM-C110	66.67 %	12.00 %	21.33 %
Distinguish between chemical and physical changes and describe the basic properties and classifications of matter.	C	CHEM-C180	100.00 %	0.00 %	0.00 %
Distinguish between chemical and physical changes and describe the basic properties and classifications of matter.	C	CHEM-C180L	34.92 %	58.73 %	6.35 %
Use the Ideal Gas Law and associated laws to describe and explain gas behavior qualitatively and quantitatively.	C	CHEM-C180	100.00 %	0.00 %	0.00 %
Use the Ideal Gas Law and associated laws to describe and explain gas behavior qualitatively and quantitatively.	C	CHEM-C180L	95.24 %	0.00 %	4.76 %
Predict the physical, chemical, and electronic properties of elements using the periodic table.	C	CHEM-C180	71.43 %	28.57 %	0.00 %
Write, balance, and perform calculations based on chemical reactions of various types and know and use the mole concept to quantify the amounts and composition of chemicals and solutions.	C	CHEM-C180	100.00 %	0.00 %	0.00 %
Write, balance, and perform calculations based on chemical reactions of various types and know and use the mole concept to quantify the amounts and composition of chemicals and solutions.	C	CHEM-C180L	95.24 %	3.17 %	1.59 %
Describe the composition of the atoms, subatomic particles, and the positions of electrons.	C	CHEM-C180	100.00 %	0.00 %	0.00 %
Describe the composition of the atoms, subatomic particles, and the positions of electrons.	C	CHEM-C180L	98.41 %	0.00 %	1.59 %
Predict the physical, chemical and electronic properties of elements using the periodic table.	C	CHEM-C180L	85.71 %	11.11 %	3.17 %
Demonstrate ability to apply critical thinking and analysis.	I	BIOL-C100	74.20 %	10.14 %	15.66 %
Demonstrate ability to apply critical thinking and analysis.	I	CHEM-C110	90.67 %	2.67 %	6.67 %
Demonstrate ability to apply critical thinking and analysis.	I	CHEM-C180	100.00 %	0.00 %	0.00 %
Demonstrate ability to apply critical thinking and analysis.	I	CHEM-C180L	85.71 %	12.70 %	1.59 %
Use scientiic and quantitative reasoning.	I	BIOL-C100	65.48 %	14.23 %	20.28 %
Use scientiic and quantitative reasoning.	I	CHEM-C110	81.33 %	5.33 %	13.33 %
Use scientiic and quantitative reasoning.	I	CHEM-C180	100.00 %	0.00 %	0.00 %
Use scientiic and quantitative reasoning.	I	CHEM-C180L	93.65 %	4.76 %	1.59 %

Compare and contrast the cellular components and cellular functions observed in the various domains of life.	C	BIOL-C100	67.79 %	15.66 %	16.55 %
By applying the concept of how structure is related to function, identify the major taxonomic groups of organisms and compare and contrast their major anatomical, physiological, and ecological characteristics.	C	BIOL-C100	65.30 %	14.06 %	20.64 %
Discuss how natural selection and mutation drive evolution in living organisms.	C	BIOL-C100	61.03 %	19.04 %	19.93 %