

SLO Performance - By Department, Course, CSLO

Program: Engineering

Date: 09/24/2018

Course Group: Engineering Technology Associate of
Science Degree

Terms: Summer 2018, Spring 2018, Fall 2017

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	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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%

MATHB6A: Analytic Geometry/Calculus I

Upon completion student will be able to: Translate application problems, such as related rates, optimization, and velocity-displacement. Solve and interpret solutions using calculus.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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 appropriate algorithms to evaluate limits, derivatives, and integrals to formulate solutions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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%

Demonstrate the concepts of calculus by communicating in written, verbal and graphical form.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	13	12.62%	28	27.18%	33	32.04%	29	28.16%	103	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	13	12.62%	28	27.18%	33	32.04%	29	28.16%	103	100.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	13	12.62%	28	27.18%	33	32.04%	29	28.16%	103	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	13	12.62%	28	27.18%	33	32.04%	29	28.16%	103	100.00%

MATHB6B: Analytic Geometry/Calculus II

Upon completion the student will be able to: 1. Calculate derivatives of exponential and logarithmic functions, inverse trigonometric functions, hyperbolic functions, and inverse hyperbolic functions. Identify when to use logarithmic differentiation. Solve problems involving exponential and logarithm functions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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. Integrate exponential and logarithmic functions, and hyperbolic functions. Identify integrands that are derivatives of inverse trigonometric functions or inverse hyperbolic functions. Determine when to use u-substitution or complete the square.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	2	5.13%	25	64.10%	6	15.38%	6	15.38%	39	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	2	5.13%	25	64.10%	6	15.38%	6	15.38%	39	100.00%

3. Determine an appropriate method of integration and apply that method. Choose partial fractions (may first require long division), integration by parts, trigonometric substitution (use a triangle or an identity) or a combination of methods. Use numerical methods such as the trapezoidal rule or Simpson's Rule to evaluate a definite integral.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	3	3.70%	2	2.47%	40	49.38%	36	44.44%	81	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	3	3.70%	2	2.47%	40	49.38%	36	44.44%	81	100.00%

4. Evaluate improper integrals, as well as use L'Hopital's Rule to evaluate limits of indeterminate form and ranking of functions according to their growth rates.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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. Know properties of sequences. Recognize monotonic sequences and know when they converge. Test whether a sequence converges or diverges by using a limit or the Sandwich Theorem.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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. Be familiar with geometric series, telescoping series, and p-series. Test whether a series converges (absolutely or conditionally) or diverges. Be able to apply the nth-term test for divergence, the integral test, the direct comparison test, the limit comparison test, the ratio test, and the nth-root test. Determine radius and interval of convergence.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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. Additional applications such as work, volumes, arc length, area of a surface of revolution, moments and centers of mass, separable differential equations, growth and decay.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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. Build the Taylor series, Taylor polynomial of order n, or Maclaurin series of a function. Know the form of the binomial series. Estimate the error in truncating a series. Differentiate and integrate power series.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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%

9. Translate rectangular coordinates to polar coordinates and polar to rectangular. Graph, calculate slope, area, or shared area of polar curves.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	5	4.17%	27	22.50%	46	38.33%	42	35.00%	120	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	5	4.17%	27	22.50%	46	38.33%	42	35.00%	120	100.00%

ENGRB45: Properties of Materials**3. Evaluate, design and select proper materials for given applications.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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. Calculate or estimate material performance based on reference properties or measured values.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	30	100.00%	0	0.00%	0	0.00%	30	100.00%
Totals	0	0.00%	30	100.00%	0	0.00%	0	0.00%	30	100.00%

Upon completion the student will be able to: 1. Analyze the connection between atomic structure and macroscopic behavior in materials.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	20	66.67%	4	13.33%	6	20.00%	30	100.00%
Totals	0	0.00%	20	66.67%	4	13.33%	6	20.00%	30	100.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	50	83.33%	4	6.67%	6	10.00%	60	100.00%
Totals	0	0.00%	50	83.33%	4	6.67%	6	10.00%	60	100.00%

PHYSB2B: General Physics - Sound, Light, Electricity, Magnetism, Modern Physics

Upon completion the student will be able to: demonstrate the ability to employ the principles and conservation laws encountered in this physics course to solve conceptual problems in electricity, magnetism, and modern physics. The student will demonstrate the ability to build on the principles and conservation laws encountered in the previous physics course in the sequence (Newtonian mechanics) to solve conceptual problems.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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:continue to perfect the critical reading skills that are necessary in assimilating the type of technical material encountered in a physics course in electricity, magnetism, and modern physics. These reading skills are crucial in learning to apply physics principles to conceptual and quantitative problem solving and also to understand problem-solving methodology as is guided by sample problems within the textbook.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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:develop an effective methodological approach to quantitative problem solving in electricity, magnetism, and modern physics. The student will show evidence of seeking and using “conceptual keys” (principles and conservation laws) to build on in quantitative problem solving. The student will become skilled in the organization and documentation of work done in quantitative problem-solving exercises.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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 a multifunction regression analysis on paired data and (1) fit the data with a regression equation, and (2) use the regression equation as a tool in making estimations. The student will be able to use the coefficient of determination from a regression analysis to evaluate the goodness-of-fit of the regression equation.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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:become proficient in the type of problem solving typical in an introductory physics course in electricity, magnetism, and modern physics. In this sense, “problem solving” is meant to include (1) the critical reading of the problem, (2) the recognition of principles involved in the problem, (3) the identification of the information given and the quantity requested, (4) the feasibility of a solution, (5) the identification a group of relevant formulae essential to obtain a solution, and (6) the successful employment of mathematical operations used to obtain the solution.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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:effectively employ the math skills of algebra and trigonometry, and the interpretive tools of some useful statistical methods as would be used in analyzing experimental data. This would include finding various “measures of central tendency” and other relevant parameters associated with data. The student will be able to correctly use/interpret such experimental quantities as uncertainties, units, measurement precision, and measurement accuracy.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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:continue to perfect the laboratory skills of (1) being able to use laboratory apparatus properly, (2) following safe laboratory practices, (3) following written and verbal directions, (4) making measurements with appropriate precision, and (5) evaluating the accuracy of measurements. The student will also be able to configure laboratory apparatus given a schematic diagram to work with.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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%

ENGRB47: Introduction to Engineering and Design

Upon completion the student will be able to: Describe the role of engineers in society and classify the different engineering branches, the functions of an engineer, and industries in which they work.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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%

Identify and describe academic pathways to a bachelor's degree.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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%

Develop and apply effective strategies to succeed academically.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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 engineering ethical principles and standards.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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%

Demonstrate knowledge of effective practices for writing technical engineering documents and making oral presentations.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	50	87.72%	0	0.00%	7	12.28%	57	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	50	87.72%	0	0.00%	7	12.28%	57	100.00%

Analyze engineering problems using the engineering design process.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	3	4.23%	67	94.37%	0	0.00%	1	1.41%	71	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	3	4.23%	67	94.37%	0	0.00%	1	1.41%	71	100.00%

Demonstrate teamwork skills in working on an engineering design team.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
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	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	3	2.34%	117	91.41%	0	0.00%	8	6.25%	128	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	3	2.34%	117	91.41%	0	0.00%	8	6.25%	128	100.00%

Report Totals:

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	21	5.98%	172	49.00%	79	22.51%	79	22.51%	351	100.00%
Fall 2017	0	0.00%	50	83.33%	4	6.67%	6	10.00%	60	100.00%
Totals	21	5.11%	222	54.01%	83	20.19%	85	20.68%	411	100.00%