

SLO Performance Report

Program: Physics

Date: 11-02-2019

Terms: Spring 2019, Fall 2018, Summer 2018

PHYSB4A: Mechanics and Wave Motion

1. Upon successful completion of this course, the student will be able to perform unit conversions required in various computations of physical quantities.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	1	0.97%	45	43.69%	48	46.60%	9	8.74%	103	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	1	0.97%	45	43.69%	48	46.60%	9	8.74%	103	100.00%

2. Upon successful completion of this course, the student will be able to apply significant information of physics problems, analyze the information, and apply appropriate solutions to the problems.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	40	38.83%	32	31.07%	17	16.50%	14	13.59%	103	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	40	38.83%	32	31.07%	17	16.50%	14	13.59%	103	100.00%

3. Upon successful completion of this course, the student will be able to use basic calculus, algebra and trigonometry to solve physics problems.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	8	7.77%	24	23.30%	54	52.43%	17	16.50%	103	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	8	7.77%	24	23.30%	54	52.43%	17	16.50%	103	100.00%

4. Upon successful completion of this course, the student will be able to understand the concepts of the fundamental theories, principles and laws of physics.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	8	7.77%	26	25.24%	47	45.63%	22	21.36%	103	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	8	7.77%	26	25.24%	47	45.63%	22	21.36%	103	100.00%

5. Upon successful completion of this course, the student will be able to perform the experiments, collect the data, and analyze the results.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	0	0.00%	89	86.41%	11	10.68%	3	2.91%	103	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	89	86.41%	11	10.68%	3	2.91%	103	100.00%

6. Upon successful completion of this course, the student will be able to apply fundamental physics theories and laws to explain various physical phenomena.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	8	7.77%	15	14.56%	44	42.72%	36	34.95%	103	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	8	7.77%	15	14.56%	44	42.72%	36	34.95%	103	100.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	65	10.52%	231	37.38%	221	35.76%	101	16.34%	618	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	65	10.52%	231	37.38%	221	35.76%	101	16.34%	618	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	
Spring 2019	1	4.35%	13	56.52%	5	21.74%	4	17.39%	23	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	1	4.35%	13	56.52%	5	21.74%	4	17.39%	23	100.00%

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	
Spring 2019	8	34.78%	9	39.13%	5	21.74%	1	4.35%	23	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	8	34.78%	9	39.13%	5	21.74%	1	4.35%	23	100.00%

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	
Spring 2019	0	0.00%	13	56.52%	7	30.43%	3	13.04%	23	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	13	56.52%	7	30.43%	3	13.04%	23	100.00%

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	
Spring 2019	0	0.00%	9	39.13%	13	56.52%	1	4.35%	23	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	9	39.13%	13	56.52%	1	4.35%	23	100.00%

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	
Spring 2019	1	4.35%	2	8.70%	11	47.83%	9	39.13%	23	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	1	4.35%	2	8.70%	11	47.83%	9	39.13%	23	100.00%

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	
Spring 2019	1	4.35%	22	95.65%	0	0.00%	0	0.00%	23	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	1	4.35%	22	95.65%	0	0.00%	0	0.00%	23	100.00%

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	
Spring 2019	3	13.04%	11	47.83%	8	34.78%	1	4.35%	23	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	3	13.04%	11	47.83%	8	34.78%	1	4.35%	23	100.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	14	8.70%	79	49.07%	49	30.43%	19	11.80%	161	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	14	8.70%	79	49.07%	49	30.43%	19	11.80%	161	100.00%

PHYSB4B: Heat, Electricity, Magnetism

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 thermodynamics, electricity, and magnetism. The student will demonstrate the ability to build on the principles and conservation laws encountered in the previous physic course in the sequence (Newtonian mechnaics) to solve conceptual.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2018	0	0.00%	30	50.85%	16	27.12%	13	22.03%	59	100.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	30	50.85%	16	27.12%	13	22.03%	59	100.00%

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 thermodynamics, electricity, and magnetism. 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	
Spring 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2018	0	0.00%	38	32.20%	56	47.46%	24	20.34%	118	100.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	38	32.20%	56	47.46%	24	20.34%	118	100.00%

Upon completion the student will be able to: continue to develop an effective methodological approach to quantitative problem solving in 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	
Spring 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2018	0	0.00%	51	43.22%	33	27.97%	34	28.81%	118	100.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	51	43.22%	33	27.97%	34	28.81%	118	100.00%

Upon completion the student will be able to: be able to perform a multifunction regression analysis on paired data and (1) fit the data with a regression equation, (2) use the regression equation as a tool in making estimations, and (3) employing integral and differential calculus techniques in obtaining quantities related to regression equations. 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	
Spring 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2018	2	3.39%	56	94.92%	1	1.69%	0	0.00%	59	100.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	2	3.39%	56	94.92%	1	1.69%	0	0.00%	59	100.00%

Upon completion the student will be able to:become proficient in the type of problem solving typical in an introductory physics course in thermodynamics, electricity, and magnetism. 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	
Spring 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2018	0	0.00%	26	22.03%	60	50.85%	32	27.12%	118	100.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	26	22.03%	60	50.85%	32	27.12%	118	100.00%

Upon completion the student will be able to:effectively employ the math skills and 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, and to be able to work with both discrete and continuous distributions. 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	
Spring 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2018	2	3.39%	57	96.61%	0	0.00%	0	0.00%	59	100.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	2	3.39%	57	96.61%	0	0.00%	0	0.00%	59	100.00%

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	
Spring 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2018	0	0.00%	10	8.47%	94	79.66%	14	11.86%	118	100.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	10	8.47%	94	79.66%	14	11.86%	118	100.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2018	4	0.62%	268	41.29%	260	40.06%	117	18.03%	649	100.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	4	0.62%	268	41.29%	260	40.06%	117	18.03%	649	100.00%

PHYSB4C: Optics and Modern Physics

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

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	0	0.00%	15	37.50%	17	42.50%	8	20.00%	40	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	15	37.50%	17	42.50%	8	20.00%	40	100.00%

Upon completion the student will be able to:The student will continue to perfect the critical reading skills that are necessary in assimilating the type of technical material encountered in a physics course in optics 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	
Spring 2019	0	0.00%	18	45.00%	13	32.50%	9	22.50%	40	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	18	45.00%	13	32.50%	9	22.50%	40	100.00%

Upon completion the student will be able to:The student will continue to develop an effective methodological approach to quantitative problem solving in 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	
Spring 2019	0	0.00%	22	55.00%	10	25.00%	8	20.00%	40	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	22	55.00%	10	25.00%	8	20.00%	40	100.00%

Upon completion the student will be able to:The student will be able to perform a multifunction regression analysis on paired data and (1) fit the data with a regression equation, (2) use the regression equation as a tool in making estimations, and (3) employ integral and differential calculus techniques in obtaining quantities related to regression equations. The student will be able to use the coefficient of determination from a regression analysis to evaluate the fit of the regression equation.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	1	2.50%	22	55.00%	12	30.00%	5	12.50%	40	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	1	2.50%	22	55.00%	12	30.00%	5	12.50%	40	100.00%

Upon completion the student will be able to:The student will become proficient in the type of problem solving typical in an introductory physics course in optics 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	
Spring 2019	1	1.64%	18	29.51%	28	45.90%	14	22.95%	61	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	1	1.64%	18	29.51%	28	45.90%	14	22.95%	61	100.00%

Upon completion the student will be able to:The student will effectively employ the math skills and the interpretive tools of some useful statistical methods as would be used in analyzing experimental data in optics and modern physics. 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	
Spring 2019	0	0.00%	10	29.41%	17	50.00%	7	20.59%	34	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	10	29.41%	17	50.00%	7	20.59%	34	100.00%

Upon completion the student will be able to:The student will 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 in optics and modern physics experiments given a schematic diagram to work with.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	1	2.50%	31	77.50%	4	10.00%	4	10.00%	40	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	1	2.50%	31	77.50%	4	10.00%	4	10.00%	40	100.00%

Upon completion the student will be able to:The student will be able to effectively incorporate the mathematical tools of differential calculus, integral calculus, and vector calculus into quantitative problem solving in this course. The student will demonstrate the ability to use some techniques from differential equations (as embedded in this course) to deal with wave functions and Schrodinger's Equation as is encountered in quantum mechanics.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	0	0.00%	25	62.50%	6	15.00%	9	22.50%	40	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	25	62.50%	6	15.00%	9	22.50%	40	100.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	3	0.90%	161	48.06%	107	31.94%	64	19.10%	335	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	3	0.90%	161	48.06%	107	31.94%	64	19.10%	335	100.00%

PHYSB2A: General Physics-Mechanics and Heat

1. Upon successful completion of this course, the student will be able to understand conceptually the properties of matter, basic principles and laws of mechanics and heat.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	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 successful completion of this course, the student will be able to compute practical physics quantities in physics problems, using the theories and laws of mechanics, heat and wave motions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	3	5.00%	9	15.00%	40	66.67%	8	13.33%	60	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	3	5.00%	9	15.00%	40	66.67%	8	13.33%	60	100.00%

3. Upon successful completion of this course, the student will be able to use basic algebra and trigonometry in solving physics problems.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	3	5.00%	11	18.33%	37	61.67%	9	15.00%	60	100.00%
Fall 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	3	5.00%	11	18.33%	37	61.67%	9	15.00%	60	100.00%

4. Upon successful completion of this course, the student will be able to recognize significant information in physics problems, analyze the information, and apply appropriate solutions to the physics problems.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	3	5.00%	11	18.33%	38	63.33%	8	13.33%	60	100.00%
Fall 2018	4	19.05%	4	19.05%	8	38.10%	5	23.81%	21	100.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	7	8.64%	15	18.52%	46	56.79%	13	16.05%	81	100.00%

5. Upon successful completion of this course, the student will be able to perform unit conversions required in various calculations with physical quantities.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2018	4	19.05%	6	28.57%	9	42.86%	2	9.52%	21	100.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	4	19.05%	6	28.57%	9	42.86%	2	9.52%	21	100.00%

6. Upon successful completion of this course, the student will be able to perform the experiments, collect the data, and analyze the results.

CSLO not included in any Assessment Rubric

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	9	5.00%	31	17.22%	115	63.89%	25	13.89%	180	100.00%
Fall 2018	8	19.05%	10	23.81%	17	40.48%	7	16.67%	42	100.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	17	7.66%	41	18.47%	132	59.46%	32	14.41%	222	100.00%

Report Totals:

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2019	91	7.03%	502	38.79%	492	38.02%	209	16.15%	1294	100.00%
Fall 2018	12	1.74%	278	40.23%	277	40.09%	124	17.95%	691	100.00%
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	103	5.19%	780	39.29%	769	38.74%	333	16.78%	1985	100.00%