

SLO Performance Report (2019-20)

Program: Mathematics

Date: 08-17-2020

Terms: Spring 2020, Fall 2019, Summer 2019

MATHB22L: Elementary Probability and Statistics with Lab

1. Upon successful completion of the course, the student will be able to translate application problems by using inferential data analysis techniques as well as analyze and interpret solutions.

CSLO not included in any Assessment Rubric

2. Upon successful completion of the course, the student will be able to apply appropriate techniques of probability and probability distributions to solve problems.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	10	8.93%	19	16.96%	38	33.93%	45	40.18%	112	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	10	8.93%	19	16.96%	38	33.93%	45	40.18%	112	100.00%

3. Upon successful completion of the course, the student will be able to demonstrate working knowledge of descriptive statistics by clearly communicating concepts in written and verbal form.

CSLO not included in any Assessment Rubric

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	10	8.93%	19	16.96%	38	33.93%	45	40.18%	112	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	10	8.93%	19	16.96%	38	33.93%	45	40.18%	112	100.00%

MATHB1AC: Precalculus 1 Co-Requisite

1. Upon successful completion of the course, the student will be able to translate and solve application problems including exponential, linear, quadratic and optimization problems. Be able to interpret solutions.

CSLO not included in any Assessment Rubric

2. Upon successful completion of the course, the student will be able to classify various functions, and apply an appropriate algorithm to find solutions, both algebraically and by using the graph of the function.

CSLO not included in any Assessment Rubric

3. Upon successful completion of the course, the student will be able to describe the behavior of various functions and formulate conjectures on the nature of the roots of polynomials.

CSLO not included in any Assessment Rubric

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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%

MATHB1AL: Precalculus I with Lab

1. Upon successful completion of the course, the student will be able to translate and solve application problems including exponential, linear, quadratic and optimization problems. Be able to interpret solutions.

CSLO not included in any Assessment Rubric

2. Upon successful completion of the course, the student will be able to categorize various functions, and apply an appropriate algorithm to find solutions, both algebraically and by using the graph of the function.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	3	7.89%	0	0.00%	21	55.26%	14	36.84%	38	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	3	7.89%	0	0.00%	21	55.26%	14	36.84%	38	100.00%

3. Upon successful completion of the course, the student will be able to interpret the behavior of various functions and write conjectures on the nature of the roots of polynomials.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	13	59.09%	6	27.27%	3	13.64%	22	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	13	59.09%	6	27.27%	3	13.64%	22	100.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	3	5.00%	13	21.67%	27	45.00%	17	28.33%	60	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	3	5.00%	13	21.67%	27	45.00%	17	28.33%	60	100.00%

MATHB6B: Analytic Geometry/Calculus II

1. Upon successful completion of the course, the student will be able to: Apply various integration techniques to evaluate integrals, including exponential and logarithmic functions.

CSLO not included in any Assessment Rubric

2. Upon successful completion of the course, the student will be able to: Apply differentiation and integration methods to parametric and polar functions, when applicable.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	7	41.18%	4	23.53%	3	17.65%	3	17.65%	17	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	7	41.18%	4	23.53%	3	17.65%	3	17.65%	17	100.00%

3. Upon successful completion of the course, the student will be able to: Distinguish, understand, and able to apply mathematical knowledge of series and sequences.

CSLO not included in any Assessment Rubric

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	7	41.18%	4	23.53%	3	17.65%	3	17.65%	17	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	7	41.18%	4	23.53%	3	17.65%	3	17.65%	17	100.00%

MATHB51NC: Interesting Integers and Functional Fractions

No CSLOs for this course

MATHB52NC: Perfect Percents and Devious Decimals

No CSLOs for this course

MATHB71NC: Math Jam - Review of Critical Intermediate Algebra Skills

No CSLOs for this course

MATHB1B: Precalculus II

1. Upon completion of the course, the student will translate applications of distance, angle and wave behaviors by identifying and applying appropriate trigonometric formulas, and then solve and interpret solutions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 classify trigonometric functions. Apply appropriate identities and formulas to evaluate, simplify and solve equations.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	12	9.45%	9	7.09%	64	50.39%	42	33.07%	127	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	12	9.45%	9	7.09%	64	50.39%	42	33.07%	127	100.00%

3. Upon completion of the course, the student will demonstrate mathematical knowledge by clearly communicating concepts in written, verbal and graphing forms, including proofs.

CSLO not included in any Assessment Rubric

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	12	9.45%	9	7.09%	64	50.39%	42	33.07%	127	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	12	9.45%	9	7.09%	64	50.39%	42	33.07%	127	100.00%

MATHB70: Intermediate Algebra

Upon completion the student will be able to: Translate application problems involving motion, mixture and work by formulating appropriate equations, systems of equations or inequalities. Solve and interpret results.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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: Classify linear and non-linear functions, including conic and logarithmic. Apply appropriate algorithms, including factoring, graphing, and symbolic representations to find solutions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 mathematical knowledge by clearly communicating linear and non-linear concepts including radicals, exponential and logarithmic concepts in written or verbal form.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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%

MATHB75: Fundamentals of Algebra for BSTEM majors

1. Upon successful completion of the course the student will be able to translate application problems involving motion, mixture and work by formulating appropriate equations, systems of equations or inequalities as well as solve and interpret results.

CSLO not included in any Assessment Rubric

2. Upon successful completion of the course, the student will be able to classify linear and non-linear functions; apply appropriate algorithms, including factoring, graphing, and symbolic representations in order to find solutions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	5	10.00%	12	24.00%	21	42.00%	12	24.00%	50	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	5	10.00%	12	24.00%	21	42.00%	12	24.00%	50	100.00%

3. Upon successful completion of the course, the student will be able to demonstrate mathematical knowledge by clearly communicating linear and non-linear concepts in written or verbal form.

CSLO not included in any Assessment Rubric

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	5	10.00%	12	24.00%	21	42.00%	12	24.00%	50	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	5	10.00%	12	24.00%	21	42.00%	12	24.00%	50	100.00%

MATHB72: General Mathematics for Non-BSTEM majors

1. Upon successful completion of the course, the student will be able to use multiple problem-solving approaches to solve real-world application problems including linear and quadratic equations and functions.

CSLO not included in any Assessment Rubric

2. Upon successful completion of the course, the student will be able to compare and contrast mathematical arguments in written or verbal form relating to sets and logic.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	4	4.55%	16	18.18%	43	48.86%	25	28.41%	88	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	4	4.55%	16	18.18%	43	48.86%	25	28.41%	88	100.00%

3. Upon successful completion of the course, the student will be able to comprehend mathematical concepts of combinatorics, probability, and measures of central tendency.

CSLO not included in any Assessment Rubric

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	4	4.55%	16	18.18%	43	48.86%	25	28.41%	88	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	4	4.55%	16	18.18%	43	48.86%	25	28.41%	88	100.00%

MATHB2: Basic Functions and Calculus for Business

Upon completion the student will be able to: Translate application problems such as revenue, profit and cost, and then solve using calculus.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 to business applications.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 business calculus by communicating in written, verbal and graphical form.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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%

MATHB21: Special Projects in Mathematics

Upon completion the student will be able to: The student will demonstrate their knowledge of mathematics and its application in various settings.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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%

MATHB22: Elementary Probability and Statistics

Upon completion the student will be able to: Translate application problems by using inferential data analysis techniques. Analyze and interpret solutions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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: Apply appropriate techniques of probability and probability distributions to solve problems.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Spring 2020	33	8.40%	79	20.10%	138	35.11%	143	36.39%	393	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	33	8.40%	79	20.10%	138	35.11%	143	36.39%	393	100.00%

Upon completion the student will be able to: Demonstrate statistical knowledge of descriptive statistics by clearly communicating concepts in written or verbal form.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Spring 2020	33	8.40%	79	20.10%	138	35.11%	143	36.39%	393	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	33	8.40%	79	20.10%	138	35.11%	143	36.39%	393	100.00%

MATHB23: Finite Mathematics

Upon completion the student will be able to: Translate application problems related to linear programming, finance, business and economics. Solve and interpret solutions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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: Distinguish and apply appropriate formulas to solve problems involving in finance, combinatorics, and sets.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	15	7.11%	61	28.91%	65	30.81%	70	33.18%	211	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	15	7.11%	61	28.91%	65	30.81%	70	33.18%	211	100.00%

Upon completion the student will be able to: Distinguish between approaches related to linear programming, finance, and combinatorics in written or verbal form.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 2020	15	7.11%	61	28.91%	65	30.81%	70	33.18%	211	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	15	7.11%	61	28.91%	65	30.81%	70	33.18%	211	100.00%

MATHB4A: Mathematics for Elementary School Teaching

Upon completion the student will be able to: Use multiple problem-solving strategies and approaches to solve real-world application problems, and to develop problems for all contexts of basic number operations using whole numbers, integers, rational numbers, sets, functions, and logic.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 patterns and relationships between operations involving whole numbers, integers, and rational numbers, and to develop the real number system to introduce algebraic concepts within the real number system.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	4	3.70%	29	26.85%	39	36.11%	36	33.33%	108	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	4	3.70%	29	26.85%	39	36.11%	36	33.33%	108	100.00%

Develop mathematical vocabulary for use in the mathematics elementary school classroom.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 2020	4	3.70%	29	26.85%	39	36.11%	36	33.33%	108	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	4	3.70%	29	26.85%	39	36.11%	36	33.33%	108	100.00%

MATHB1A: Precalculus I

1. Upon successful completion of the course, the student will translate and solve application problems including exponential, linear, quadratic and optimization problems. Be able to interpret solutions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 the course, the student will classify various functions, and apply an appropriate algorithm to find solutions, both algebraically and by using the graph of the function.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	11	6.67%	12	7.27%	102	61.82%	40	24.24%	165	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	11	6.67%	12	7.27%	102	61.82%	40	24.24%	165	100.00%

3. Upon successful completion of the course, the student will describe the behavior of various functions. Formulate conjectures on the nature of the roots of polynomials.

CSLO not included in any Assessment Rubric

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	11	6.67%	12	7.27%	102	61.82%	40	24.24%	165	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	11	6.67%	12	7.27%	102	61.82%	40	24.24%	165	100.00%

MATHB50: Modern College Arithmetic and Pre-Algebra

Upon completion the student will be able to: Demonstrate the ability to add, subtract, multiply, and divide whole numbers, integers, fractions, mixed numbers, and decimals.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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: Solve Linear Equations by: a) Using the Addition/Subtraction property of equality, b) Using the Multiplication/Division property of equality.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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: Translate English sentences to algebraic equations.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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: Simplify mathematical statements using the correct order of operations.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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: Calculate the perimeter and area of rectangles and triangles. Calculate the area and circumference of a circle.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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: Find equivalent forms of numbers (i.e. change fractions to decimals, change percents to fractions, change fractions to percents, change decimals to fractions, change decimals to percents, change percents to decimals, change mixed numbers to improper fractions, change improper fractions to mixed numbers).

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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: Round whole numbers and decimals appropriately as directed.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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: Apply the concept of percent to real-world applications such as sales tax, discount, and simple interest.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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: Make conversions in the US Customary System of measurements, as well as in the Metric System.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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%

MATHB60: Beginning Algebra

Upon completion the student will be able to: Translate application problems, such as distance, percent, and geometry by formatting an appropriate equation or inequality. Solve and interpret solutions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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: Classify linear, rational, and quadratic functions, and apply appropriate algorithms, including factoring, graphing, and symbolic representations to find solutions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 mathematical knowledge by clearly communicating linear, exponent, and rational concepts in written or verbal form.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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%

MATHB65: Intermediate Algebra for Statistics

Upon completion the student will be able to: Translate application problems such as distance, percent, geometry, motion, mixture, and work by formatting an appropriate equation or inequality. Solve and interpret solutions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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: Classify linear, rational, exponential and logarithmic functions, and apply appropriate algorithms, including factoring, graphing, and symbolic representations to find solutions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 mathematical knowledge by clearly communicating linear, exponent, rational, and exponential and logarithmic concepts in written or verbal form.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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%

MATHB6D: Ordinary Differential Equations

No CSLOs for this course

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	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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	
Spring 2020	5	6.94%	15	20.83%	30	41.67%	22	30.56%	72	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	5	6.94%	15	20.83%	30	41.67%	22	30.56%	72	100.00%

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

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 2020	5	6.94%	15	20.83%	30	41.67%	22	30.56%	72	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	5	6.94%	15	20.83%	30	41.67%	22	30.56%	72	100.00%

MATHB6C: Calculus III

Upon completion the student will be able to: **1. Perform vector operations;**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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. Determine equations of lines and planes;

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	8	19.05%	17	40.48%	17	40.48%	42	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	8	19.05%	17	40.48%	17	40.48%	42	100.00%

Apply Greens Stokes', and divergence theorems.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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. Find the limit of a function at a point; CSLO not included in any Assessment Rubric
4. Evaluate derivatives and write the equation of a tangent plane at a point; CSLO not included in any Assessment Rubric
5. Determine differentiability; CSLO not included in any Assessment Rubric
6. Find local extrema and test for saddle points; CSLO not included in any Assessment Rubric
7. Solve constraint problems using Lagrange multipliers; CSLO not included in any Assessment Rubric
8. Compute arc length and find the divergence and curl of a vector field; CSLO not included in any Assessment Rubric
9. Evaluate two and three dimensional integrals; CSLO not included in any Assessment Rubric

10. Apply Green's, Stokes', and divergence theorems.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	14	66.67%	5	23.81%	2	9.52%	21	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	14	66.67%	5	23.81%	2	9.52%	21	100.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	22	34.92%	22	34.92%	19	30.16%	63	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	22	34.92%	22	34.92%	19	30.16%	63	100.00%

MATHB6D: Ordinary Differential Equations

Upon completion the student will be able to: Explain the criteria for the existence of a unique solution to an initial value problem.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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%

Find critical points and phase portrait for autonomous differential equations. The student will also sketch solution curves based on that information.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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%

Solve first order differential equations by separable variables, integration factors, exact equations, and substitutions. In addition, be able to find power series solutions to ordinary differential equations and apply the existence and uniqueness theorems for ordinary differential equations.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	1	1.47%	1	1.47%	33	48.53%	33	48.53%	68	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	1	1.47%	1	1.47%	33	48.53%	33	48.53%	68	100.00%

Set up differential equations to model growth and decay, Newton's Law of Warming/Cooling, mixture problems, population dynamics, and predator/prey.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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%

Solve homogenous and non-homogenous differential equations by methods that include method of undetermined coefficients, variation of parameters, Cauchy-Euler equations, and substitutions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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%

Solve system of linear differential equations by elimination and/or eigenvalues.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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%

LaPlace transforms to solve initial value problems.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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%

Use numerical methods to solve initial value problems. Methods could include Euler's method, Taylor series solution, and the Runge-Kutta method

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 2020	1	1.47%	1	1.47%	33	48.53%	33	48.53%	68	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	1	1.47%	1	1.47%	33	48.53%	33	48.53%	68	100.00%

MATHB6E: Elementary Linear Algebra

Upon completion the student will be able to: Find solutions of systems of equations using various methods appropriate to lower division linear algebra;

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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 bases and orthonormal bases to solve problems in linear algebra;

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	6	27.27%	5	22.73%	8	36.36%	3	13.64%	22	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	6	27.27%	5	22.73%	8	36.36%	3	13.64%	22	100.00%

Upon completion the student will be able to: Find the dimension of spaces such as those associated with matrices and linear transformations;

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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: Find eigenvalues and eigenvectors and use them in applications; and

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	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: Prove basic results in linear algebra using appropriate proof-writing techniques such as linear independence of vectors; properties of subspaces; linearity, injectivity and surjectivity of functions; and properties of eigenvectors and eigenvalues.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	6	75.00%	2	25.00%	0	0.00%	8	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	6	75.00%	2	25.00%	0	0.00%	8	100.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	6	20.00%	11	36.67%	10	33.33%	3	10.00%	30	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	6	20.00%	11	36.67%	10	33.33%	3	10.00%	30	100.00%

Report Totals:

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	116	7.42%	303	19.37%	635	40.60%	510	32.61%	1564	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	116	7.42%	303	19.37%	635	40.60%	510	32.61%	1564	100.00%