COURSE SLO ASSESSMENT 4-YEAR TIMELINE

Unit Name	Course SLO Assessment Cycle	Course ID	Course Name	Course SLO Title	Course SLO Statement
El Camino: Course SLOs (MATH) - Developmental Math	2013-14 (Spring 2014)	ECC: MATH 12	Basic Arithmetic Skills	SLO #2 Solving Equations and Manipulating Expressions	Students will be able to use numerical and symbolic representations to correctly perform operations (addition, subtraction, multiplication, division, exponentiation, factoring, and order of operations) on non-negative real numbers to simplify expressions.
	2013-14 (Spring 2014)	ECC: MATH 23	Pre-Algebra	SLO #2 Solving Equations and Manipulating Expressions	Students will use numerical and symbolic representations of mathematical ideas to simplify linear expressions and solve linear equations.
	2013-14 (Spring 2014)	ECC: MATH 37	Basic Accelerated Mathematics	SLO #2 Solving Equations and Manipulating Expressions	A student will be able to demonstrate the ability to identify and correctly implement techniques to symbolically solve equations, with an emphasis on linear equations, and manipulate expressions.
	2013-14 (Spring 2014)	ECC: MATH 40	Elementary Algebra	SLO #2 Solving Equations and Manipulating Expressions	Students will be able to use numerical and symbolic representations of mathematical ideas to simplify or solve linear, quadratic, rational, and radical expressions or equations.
	2013-14 (Spring 2014)	ECC: MATH 60	Elementary Geometry	SLO #2 Solving Equations and Manipulating Expressions	Students will be able to calculate perimeter, area, surface area and volume for various 2D and 3D geometric shapes.
	2013-14 (Spring 2014)	ECC: MATH 67	General Education Algebra	SLO #2 Solving Equations and Manipulating Expressions	Students will be able to symbolically (algebraically) solve a variety of equations, inequalities and linear systems and manipulate symbolic (algebraic) expressions that arise in contextualized problems using authentic, real-world data.
	2013-14 (Spring 2014)	ECC: MATH 73	Intermediate Algebra for General Education	SLO #2 Solving Equations and Manipulating Expressions	Students will be able to symbolically (algebraically) solve a variety of equations, inequalities and linear systems and manipulate symbolic (algebraic) expressions that arise in contextualized problems.
	2013-14 (Spring 2014)	ECC: MATH 80	Intermediate Algebra for Science, Technology, Engineering, and Mathematics	SLO #2 Solving Equations and Manipulating Expressions	Students will be able to evaluate numerical operations and manipulate algebraic expressions involving rational and negative exponents, radicals, complex numbers, exponents and logarithms and be able to solve linear, quadratic, polynomial, rational, radical, absolute value, exponential and logarithmic equations and inequalities.
	2014-15 (Spring 2015)	ECC: MATH 12	Basic Arithmetic Skills	SLO #1 Application Problems	Students will be able to recognize addition, subtraction, multiplication, division, exponentiation, factoring and order of operations in a given context (word problem, data, diagram, etc.) involving non-negative real numbers to write corresponding mathematical expressions and solve authentic, real-world application problems.
	2014-15 (Spring 2015)	ECC: MATH 23	Pre-Algebra	SLO #1 Application Problems	Students will recognize the underlying mathematical concepts in order to successfully evaluate expressions and formulas in a given context (word problems, data, diagrams, etc.) and apply those concepts correctly in authentic, real-world application problems.
	2014-15 (Spring 2015)	ECC: MATH 37	Basic Accelerated	SLO #1 Application	A student will be able to recognize the underlying mathematical

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	2014-15 (Spring 2015)	ECC: MATH 37	Mathematics	Problems	concepts, with an emphasis on linear relations, in a given context (word problems, data, diagrams, etc.) and apply those concepts correctly.
	2014-15 (Spring 2015)	ECC: MATH 40	Elementary Algebra	SLO #1 Application Problems	Students will be able to recognize linear and quadratic equations in a given context, and use mathematical reasoning and problem solving skills to solve authentic, real world application problems.
	2014-15 (Spring 2015)	ECC: MATH 60	Elementary Geometry	SLO #1 Application Problems	Students will be able to define geometric terms, polygons, and shapes and apply characteristics of the shapes to solve geometric problems.
	2014-15 (Spring 2015)	ECC: MATH 67	General Education Algebra	SLO #1 Application Problems	Students will be able to recognize and apply appropriate mathematical concepts and models involving a variety of functions to contextualized problems involving authentic, real-world data.
	2014-15 (Spring 2015)	ECC: MATH 73	Intermediate Algebra for General Education	SLO #1 Application Problems	Students will be able to recognize and apply appropriate mathematical concepts and models involving a variety of functions to contextualized problems (authentic, real-world applications).
	2014-15 (Spring 2015)	ECC: MATH 80	Intermediate Algebra for Science, Technology, Engineering, and Mathematics	SLO #1 Application Problems	Students will be able to solve application problems involving linear, quadratic, polynomial, rational, radical, exponential and logarithmic functions.
	2015-16 (Spring 2016)	ECC: MATH 12	Basic Arithmetic Skills	SLO #4 Articulating Mathematical Reasoning	A student completing Pre collegiate mathematics will verbally articulate (orally or in written form) the mathematical reasoning they used to solve a problem or analyze a situation.
	2015-16 (Spring 2016)	ECC: MATH 23	Pre-Algebra	SLO #4 Articulating Mathematical Reasoning	Students will verbally articulate (orally or in written form) the mathematical reasoning they used to solve a numeric or linear problem or analyze a numeric or linear situation.
	2015-16 (Spring 2016)	ECC: MATH 37	Basic Accelerated Mathematics	SLO #4 Articulating Mathematical Reasoning	A student will be able to articulate orally or in written form the mathematical reasoning they used to solve a problem or analyze a situation.
	2015-16 (Spring 2016)	ECC: MATH 40	Elementary Algebra	SLO #4 Articulating Mathematical Reasoning	Students will be able to articulate the mathematical reasoning used in a variety of problems, orally or in writing.
	2015-16 (Spring 2016)	ECC: MATH 60	Elementary Geometry	SLO #4 Articulating Mathematical Reasoning	Students will be able to prove geometric conjectures and theorems using deductive logic.
	2015-16 (Spring 2016)	ECC: MATH 67	General Education Algebra	SLO #4 Articulating Mathematical Reasoning	Students will be able to articulate the mathematical reasoning used in solving a variety of contextualized problems using authentic, real-world data, orally or in writing.
	2015-16 (Spring 2016)	ECC: MATH 73	Intermediate Algebra for General Education	SLO #4 Articulating Mathematical Reasoning	Students will be able to articulate the mathematical reasoning used in solving a variety of contextualized problems, both orally and in writing.
	2015-16 (Spring 2016)	ECC: MATH 80	Intermediate Algebra for Science, Technology, Engineering, and Mathematics	SLO #4 Articulating Mathematical Reasoning	Students will be able to explain verbally, both orally or in writing, and the mathematical reasoning used in an application problem involving linear, quadratic, polynomial, rational, radical, absolute value, exponential and logarithmic equations and inequalities.

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	2016-17 (Spring 2017)	ECC: MATH 12	Basic Arithmetic Skills	SLO #3 Visual and Graphical Methods	A student completing Pre-Collegiate mathematics will use visual and graphical methods to represent and analyze information and to solve problems using non negative real numbers, including demonstrating correct ordering of values and testing reasonableness of solutions.
	2016-17 (Spring 2017)	ECC: MATH 23	Pre-Algebra	SLO #3 Visual and Graphical Methods	Students will be able to use visual or graphical methods to solve linear equations and problems involving geometry and measurement.
	2016-17 (Spring 2017)	ECC: MATH 37	Basic Accelerated Mathematics	SLO #3 Visual and Graphical Methods	A student will be able to use visual and graphical methods to represent and analyze information and to solve problems, with an emphasis on linear graphs.
	2016-17 (Spring 2017)	ECC: MATH 40	Elementary Algebra	SLO #3 Visual and Graphical Methods	Students will be able to use graphical methods to represent linear and quadratic relations as well as systems of linear relations and to find solutions to linear and quadratic equations, as well as solve systems of linear equations.
	2016-17 (Spring 2017)	ECC: MATH 60	Elementary Geometry	SLO #3 Visual and Graphical Methods	Students will be able to construct geometric shapes using the compass and straightedge.
	2016-17 (Spring 2017)	ECC: MATH 67	General Education Algebra	SLO #3 Visual and Graphical Methods	Students will use visual and graphical methods to represent, analyze and solve contextualized problems involving authentic, real-world data.
	2016-17 (Spring 2017)	ECC: MATH 73	Intermediate Algebra for General Education	SLO #3 Visual and Graphical Methods	Students will use visual and graphical methods to represent, analyze and solve contextualized problems.
	2016-17 (Spring 2017)	ECC: MATH 80	Intermediate Algebra for Science, Technology, Engineering, and Mathematics	SLO #3 Visual and Graphical Methods	Students will be able to use visual and graphical methods to represent, analyze and solve problem involving linear, quadratic, polynomial, rational, absolute value, radical, exponential, logarithmic functions, conic sections, linear and nonlinear systems of equations. Students will also be able to solve such functions and equations using graphical methods.
	2017-18 (Spring 2018)	ECC: MATH 12	Basic Arithmetic Skills	SLO #2 Solving Equations and Manipulating Expressions	Students will be able to use numerical and symbolic representations to correctly perform operations (addition, subtraction, multiplication, division, exponentiation, factoring, and order of operations) on non-negative real numbers to simplify expressions.
	2017-18 (Spring 2018)	ECC: MATH 23	Pre-Algebra	SLO #2 Solving Equations and Manipulating Expressions	Students will use numerical and symbolic representations of mathematical ideas to simplify linear expressions and solve linear equations.
	2017-18 (Spring 2018)	ECC: MATH 37	Basic Accelerated Mathematics	SLO #2 Solving Equations and Manipulating Expressions	A student will be able to demonstrate the ability to identify and correctly implement techniques to symbolically solve equations, with an emphasis on linear equations, and manipulate expressions.
	2017-18 (Spring 2018)	ECC: MATH 40	Elementary Algebra	SLO #2 Solving Equations and Manipulating Expressions	Students will be able to use numerical and symbolic representations of mathematical ideas to simplify or solve linear, quadratic, rational, and radical expressions or equations.
	2017-18 (Spring 2018)	ECC: MATH 60	Elementary Geometry	SLO #2 Solving Equations	Students will be able to calculate perimeter, area, surface area and

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	2017-18 (Spring 2018)	ECC: MATH 60	Elementary Geometry	and Manipulating Expressions	volume for various 2D and 3D geometric shapes.
	2017-18 (Spring 2018)	ECC: MATH 67	General Education Algebra	SLO #2 Solving Equations and Manipulating Expressions	Students will be able to symbolically (algebraically) solve a variety of equations, inequalities and linear systems and manipulate symbolic (algebraic) expressions that arise in contextualized problems using authentic, real-world data.
	2017-18 (Spring 2018)	ECC: MATH 73	Intermediate Algebra for General Education	SLO #2 Solving Equations and Manipulating Expressions	Students will be able to symbolically (algebraically) solve a variety of equations, inequalities and linear systems and manipulate symbolic (algebraic) expressions that arise in contextualized problems.
	2017-18 (Spring 2018)	ECC: MATH 80	Intermediate Algebra for Science, Technology, Engineering, and Mathematics	SLO #2 Solving Equations and Manipulating Expressions	Students will be able to evaluate numerical operations and manipulate algebraic expressions involving rational and negative exponents, radicals, complex numbers, exponents and logarithms and be able to solve linear, quadratic, polynomial, rational, radical, absolute value, exponential and logarithmic equations and inequalities.
	2018-19 (Spring 2019)	ECC: MATH 12	Basic Arithmetic Skills	SLO #1 Application Problems	Students will be able to recognize addition, subtraction, multiplication, division, exponentiation, factoring and order of operations in a given context (word problem, data, diagram, etc.) involving non-negative real numbers to write corresponding mathematical expressions and solve authentic, real-world application problems.
	2018-19 (Spring 2019)	ECC: MATH 23	Pre-Algebra	SLO #1 Application Problems	Students will recognize the underlying mathematical concepts in order to successfully evaluate expressions and formulas in a given context (word problems, data, diagrams, etc.) and apply those concepts correctly in authentic, real-world application problems.
	2018-19 (Spring 2019)	ECC: MATH 37	Basic Accelerated Mathematics	SLO #1 Application Problems	A student will be able to recognize the underlying mathematical concepts, with an emphasis on linear relations, in a given context (word problems, data, diagrams, etc.) and apply those concepts correctly.
	2018-19 (Spring 2019)	ECC: MATH 40	Elementary Algebra	SLO #1 Application Problems	Students will be able to recognize linear and quadratic equations in a given context, and use mathematical reasoning and problem solving skills to solve authentic, real world application problems.
	2018-19 (Spring 2019)	ECC: MATH 60	Elementary Geometry	SLO #1 Application Problems	Students will be able to define geometric terms, polygons, and shapes and apply characteristics of the shapes to solve geometric problems.
	2018-19 (Spring 2019)	ECC: MATH 67	General Education Algebra	SLO #1 Application Problems	Students will be able to recognize and apply appropriate mathematical concepts and models involving a variety of functions to contextualized problems involving authentic, real-world data.
	2018-19 (Spring 2019)	ECC: MATH 73	Intermediate Algebra for General Education	SLO #1 Application Problems	Students will be able to recognize and apply appropriate mathematical concepts and models involving a variety of functions to contextualized problems (authentic, real-world applications).
	2018-19 (Spring 2019)	ECC: MATH 80	Intermediate Algebra for Science, Technology,	SLO #1 Application Problems	Students will be able to solve application problems involving linear, quadratic, polynomial, rational, radical, exponential and logarithmic

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	2018-19 (Spring 2019)	ECC: MATH 80	Engineering, and Mathematics	SLO #1 Application Problems	functions.
	2019-20 (Spring 2020)	ECC: MATH 12	Basic Arithmetic Skills	SLO #4 Articulating Mathematical Reasoning	A student completing Pre collegiate mathematics will verbally articulate (orally or in written form) the mathematical reasoning they used to solve a problem or analyze a situation.
	2019-20 (Spring 2020)	ECC: MATH 23	Pre-Algebra	SLO #4 Articulating Mathematical Reasoning	Students will verbally articulate (orally or in written form) the mathematical reasoning they used to solve a numeric or linear problem or analyze a numeric or linear situation.
	2019-20 (Spring 2020)	ECC: MATH 37	Basic Accelerated Mathematics	SLO #4 Articulating Mathematical Reasoning	A student will be able to articulate orally or in written form the mathematical reasoning they used to solve a problem or analyze a situation.
	2019-20 (Spring 2020)	ECC: MATH 40	Elementary Algebra	SLO #4 Articulating Mathematical Reasoning	Students will be able to articulate the mathematical reasoning used in a variety of problems, orally or in writing.
	2019-20 (Spring 2020)	ECC: MATH 60	Elementary Geometry	SLO #4 Articulating Mathematical Reasoning	Students will be able to prove geometric conjectures and theorems using deductive logic.
	2019-20 (Spring 2020)	ECC: MATH 67	General Education Algebra	SLO #4 Articulating Mathematical Reasoning	Students will be able to articulate the mathematical reasoning used in solving a variety of contextualized problems using authentic, real-world data, orally or in writing.
	2019-20 (Spring 2020)	ECC: MATH 73	Intermediate Algebra for General Education	SLO #4 Articulating Mathematical Reasoning	Students will be able to articulate the mathematical reasoning used in solving a variety of contextualized problems, both orally and in writing.
	2019-20 (Spring 2020)	ECC: MATH 80	Intermediate Algebra for Science, Technology, Engineering, and Mathematics	SLO #4 Articulating Mathematical Reasoning	Students will be able to explain verbally, both orally or in writing, and the mathematical reasoning used in an application problem involving linear, quadratic, polynomial, rational, radical, absolute value, exponential and logarithmic equations and inequalities.