

West Los Angeles College

SLO Addendum

Course Name and Number MATH 112

Course Title PRE-ALGEBRA

Course Objectives (as stated in the Course Outline of Record)

1. Write and interpret fractions, and represent common fractions in multiple ways.
2. Add, subtract, multiply, and divide common fractions and mixed numbers.
3. Solve applications problems involving common fractions.
4. Read, write, round off, and compare decimal fractions.
5. Add, subtract, multiply, and divide decimals.
6. Convert among common fractions, decimals, and percents.
7. Write, interpret, simplify, and convert ratios and rates.
8. Solve problems involving proportions and percents.
9. Calculate powers and rational roots (where they exist) of rational numbers.
10. Read, construct, and interpret line graphs, bar graphs, and scatter plots.
11. Calculate and interpret the absolute value of a number.
12. Add, subtract, multiply, and divide integers.
13. Add, subtract, multiply, and divide non-integral rational numbers.
14. Identify and correctly use algebraic properties (commutative, associative, distributive; additive and multiplicative identities and inverses).
15. Use and manipulate variable representations in abstract and applied contexts.
16. Use basic properties of integer exponents to simplify expressions.
17. Add, subtract, multiply polynomials; divide a polynomial by a non-zero monomial.
18. Solve linear equations using the addition, subtraction, multiplication, and division.

Math Program SLOs

1. Apply quantitative thinking processes using basic mathematical operations (addition, subtraction, multiplication, division) to solve common academic, workplace, and family problems. (Theme: Quantitative thinking; mathematical operations)
2. Analyze and interpret spatial and graphic data (schedules, maps, tables, graphs, and geometric figures). (Theme: spatial and graphic data).
3. Use mathematical tools essential for analyzing quantitative problems and for producing solutions. (Theme: mathematical tools)
4. Apply advanced mathematical concepts and tools (algebra, calculus) essential in upper division academic work and/or workplace tasks. (Theme: advanced mathematical operations—algebra, calculus)
5. Select appropriate math strategies for solving and handling application problems involving (for example) finance, science, economics, and family issues. (Theme: mathematical problem-solving)

<p align="center"><u>Course SLO</u></p> <p>One sentence that describes a major piece of knowledge, skill, or ability that students can demonstrate by the end of the course</p> <p><i>Finish the sentence, "At end of the course, the successful student will be able to... "</i></p>	<p align="center"><u>Assessment Method</u></p> <p>Major assignment, project or test used to demonstrate or apply outcome</p> <p><i>Remember to have a mix of qualitative and quantitative assessment methods.</i></p>	<p align="center"><u>Criterion Level</u></p> <p>Reflects satisfactory performance on the SLO</p> <ul style="list-style-type: none"> • <i>At least X percent of students achieve this course SLO.</i> • <i>All students achieve at least the Y level on this SLO.</i> • <i>At least X percent of students achieve the Y level on this course SLO.</i>
<p>1. Solve elementary practical applications using fractions and decimals.</p>	<p>Students will answer questions embedded in a common assessment tool. on a final exam. A scantron scanner will be used to access the results for each of the relevant questions</p>	<p>Each question will be answered correctly by at least 50% of students (fractions, mixed numbers) or 60% of students (decimal numbers).</p>
<p>2. Construct variable representations in abstract and applied contexts.</p>	<p>Students will answer questions embedded in a common assessment tool. on a final exam. A scantron scanner will be used to access the results for each of the relevant questions</p>	<p>Each question will be answered correctly by at least 40% of students.</p>
<p>3. Solve problems involving proportions and percents</p>	<p>Students will answer questions embedded in a common assessment tool. on a final exam. A scantron scanner will be used to access the results for each of the relevant questions</p>	<p>Each question will be answered correctly by at least 50% of students.</p>

Mapping to Program SLO and Institutional SLOs

Please indicate with an "X" in the appropriate boxes below, the Course SLO mapping to the corresponding Program and Institutional SLO(s).

Course SLO	Program SLO												Institutional SLO									
	1	2	3	4	5	6	7	8	9	10	11	12	A	B	C	D	E	F	G	H	I	
#1	x		x		x								x		x							
#2	x		x		x								x		x							
#3	x		x		x								x	x	x							
#4																						

Course SLO Acknowledgements

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