Course Information Form (CIF)

Course Code: MAT 060

Course Title: Pre-Algebra Skills

Department: Mathematics
PCS Code: 1.4 - Remedial Education
CIP Code: 32.0104
Repeatability: 0

Effective Date: Summer 2026

Credit Hours

Catalog Notation: 4-0-4
Credit Hour Distribution:

Lecture: 4	Lab: 0	Clinical: 0	**Total: 4**

General Course Information

Catalog Description

Ratio, proportion, percent, conversion of units, area, perimeter, signed numbers, order of operations, formulas, basic equations, basic exponent laws, word phrases, and basic word problems.

General Course Objectives

Students will develop numeracy and algebraic skills in whole numbers, integers, decimals, and fractions. Students will compute and apply ratios, proportions, percentages, and conversions factors to real life problems.

Minimum Placement Levels

English	Reading	Math
None	None	Placement into MAT 060

Prerequisites

None

Methods of Evaluation

4-5 exams, 10-30 quizzes/assignments, and a cumulative final exam.

Instructional Materials and Additional Supplies

ALEKS 360 Inclusive Access Online Access (18 weeks) for Prealgebra, Miller/O'Neill/Hyde; PreAlgebra; 3rd edition. ISBN 978-1-2642-4122-4 - Online Content with e-book
MAT 059 and 060 Course Packet, Cost $10-$12.
Sharp model EL 501X scientific calculator; $9.99.

Course Content

General Learning Outcomes (GLOs)

- Reasoning and Inquiry: Students will demonstrate the ability to solve problems using deductive reasoning and logic, quantitative reasoning, or the scientific method.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Whole Numbers and Whole Number Concepts	1. Round whole numbers. 2. Identify and make use of the properties of whole numbers. 3. Interpret and solve application problems.	3	0	0
Signed Numbers	1. Graph signed numbers on the number line. 2. Perform the four basic operations with signed numbers and use the correct order of operations. 3. Simplify signed number expressions that include exponents. 4. Evaluate algebraic expressions involving signed numbers.	5	0	0
Simplifying Algebraic Expressions and Solving Linear Equations	1. Simplify algebraic expressions and write algebraic phrases. 2. Solve algebraic equations involving more than one property. 3. Set up and solve basic word problems.	7	0	0
Fractions and Mixed Numbers	1. Perform basic operations involving fractions and mixed numbers as well as interpret and solve application problems involving fractions. 2. Solve algebraic equations involving fractions.	10	0	0
Decimals	1. Perform basic operations involving decimals including exponents and roots. 2. Convert from fractions to decimals and vice versa. 3. Interpret and solve application problems involving decimals. 4. Solve algebraic equations involving decimals.	4	0	0
Geometry	1. Identify shapes of geometric objects. 2. State the formulas for perimeter, area, and volume of geometric objects. 3. Calculate the perimeter and area of a compound figure. 4. Measure real life objects and compare those measurements to those obtained using the appropriate formula.	3	0	0
Statistics	1. Find the mean, median, mode, and range of a given set of data. 2. Calculate GPA.	2	0	0
Ratios, Rates, and Proportions	1. Use the concepts of ratios, rates, and proportions. 2. Interpret and solve word problems using proportions.	3	0	0
Percents	1. Convert percentages to fractions and/or decimals and vice versa, and solve application problems involving percentages.	5	0	0
Measurement	1. Convert between the English and the metric system of measurement. 2. Solve application problems in the English and the metric system.	3	0	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Graphing	1. Plot and identify points and quadrants in the rectangular coordinate system. 2. Graph linear equations in two variables.	1	0	0
Polynomials	1. Add, subtract, and multiply monomials. 2. Use scientific notation.	1	0	0
Review and Exams	1. Earn at least a 70 percent on each of the unit exams and the cumulative final exam.	13	0	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
60	0	0