MATH A060N: MATH SKILLS FOR LIBERAL ARTS MATHEMATICS AND STATISTICS

Item	Value
Curriculum Committee Approval Date	12/06/2023
Top Code	170200 - Mathematics Skills
Units	0 Total Units
Hours	54 Total Hours (Lab Hours 54)
Total Outside of Class Hours	0
Course Credit Status	Noncredit: Support Course (U)
Material Fee	No
Basic Skills	Basic Skills (B)
Repeatable	Yes; Repeat Limit 99
Grading Policy	P/NP/SP Non-Credit (D)

Course Description

This noncredit course will help students build various skills required in their Liberal Arts Mathematics or Introduction to Statistics course. These skills include solving linear equations, performing operations with real numbers, and converting between percentages, fractions, and decimals. Students enrolled in this class should be concurrently enrolled in a transfer-level math class 100 level or higher. NOT DEGREE APPLICABLE. Not Transferable.

Course Level Student Learning Outcome(s)

1. Students will be able to demonstrate improvement in skills required for Liberal Arts Mathematic or Introduction to Statistics including operation with real numbers, solving linear equations, converting between percentages, fractions and decimals.

Course Objectives

- 1. Build skills related to operations with real numbers
- 2. Build skills related to percentages as decimals and fractions
- 3. Build skills related to linear equations
- 4. Build skills related to graphing lines
- 5. Build skills related to linear inequalities
- 6. Build skills related to the union, intersection, and complement of sets
- 7. Build skills related to translating English statements into mathematical symbols

Lecture Content

Students will build skills in the following areas as needed: Operations with Real Numbers Rounding Addition, subtraction, multiplication, and division of real numbers Evaluate expressions with exponents and square roots Order of operations Scientific notation Algebra Topics Evaluating algebraic expressions Solve linear equations Compound inequalities and interval notation Solving basic exponential equations using logarithms Graphing an inequality in one variable on the number line Introdcution to Graphing Lines The cartesian coordinate system Finding intercepts and slopes of lines Graph linear equations Interpreting the slope and y-intercept of a linear equation Additional Topics Percentages as decimals and fractions Set-builder notation Union, intersection, and complement of sets Convert units Use calculators to evaluate algebraic expressions Translate English tatements into matematical symbols

Method(s) of Instruction

- Enhanced NC Lab (NC2)

Instructional Techniques

Lecture Discussion Collaborative Learning Guided Independent Study

Reading Assignments

Students will spend approximately half an hour per week reading from the assigned text or other materials.

Writing Assignments

Students will spend approximately half an hour per week on writing assignments.

Out-of-class Assignments

Students will spend approximately one hour per week on out-of-class assignments including problem solving exercises.

Demonstration of Critical Thinking

Applications of skills to problem solving exercises

Required Writing, Problem Solving, Skills Demonstration

Problem solving exercises

Eligible Disciplines

Mathematics: Masters degree in mathematics or applied mathematics OR bachelors degree in either of the above AND masters degree in statistics, physics, or mathematics education OR the equivalent. Masters degree required.

Textbooks Resources

1. Required Miller, J. Beginning and Intermediate Algebra, 6th ed. McGraw Hill, 2022