MATH A090: SUPPORT FOR LIBERAL ARTS MATHEMATICS

Item	Value
Curriculum Committee Approval Date	12/06/2023
Top Code	170200 - Mathematics Skills
Units	2 Total Units
Hours	36 Total Hours (Lecture Hours 36)
Total Outside of Class Hours	0
Course Credit Status	Credit: Support Course - Non-Degree Applicable (S)
Material Fee	No
Basic Skills	Basic Skills (B)
Repeatable	No
Grading Policy	Pass/No Pass (B)

Course Description

A concurrent support course for Math A100, Liberal Arts Mathematics, designed to review prerequisite skills necessary for success. Topics include operations with real numbers; conversion between decimals, percents and fractions; selected algebraic topics essential to Liberal Arts Mathematics; and problem-solving strategies. COREQUISITE: MATH A100. NOT DEGREE APPLICABLE. Not Transferable.

Course Level Student Learning Outcome(s)

1. Solve linear equations
2. Solve word problems based on the strategies discussed in class

Course Objectives

- 1. Perform operations with real numbers.
- 2. Convert between decimal, percent and fraction.
- 3. Evaluate Algebraic Expression
- 4. Solve linear equations.
- 5. Solve word problems related to statistics.

Lecture Content

Stategies for Success Operations with real numbers Rounding Addition, subtraction, multiplication, and division of real numbers Order of operations Computations with a calculator Percents Percents as decimals and fractions Selected algebraic topics Evaluating algebraic expressions Solving linear equations and linear inequalities Solving exponential equations using logarithms Selected Geometry Topics Points, lines, and angles Triangles, rectangles, squares, and circles Skills for solving word problems in statistics Identify the question to be answered Setting up appropriate notation Setting up an appropriate equation/inequality Clearly communicating the correct answer

Method(s) of Instruction

- Lecture (02)

Instructional Techniques

Lecture, discussion, collaborative learning

Reading Assignments

Textbook chapters and supplements. 1 hour/week

Writing Assignments

Short-answer questions. Essay questions. Group and/or individual projects. 1 hour/week

Out-of-class Assignments

Practice problem sets requiring application of course material Preparation assignments that require students to answer specific questions that will be discussed in an upcoming class meeting. 2 hours/week

Demonstration of Critical Thinking

Group work, quizzes or written tests, and application of skills in support of Liberal Arts Mathematics.

Required Writing, Problem Solving, Skills Demonstration

Group work, quizzes or written tests

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 Sobecki, D. Math in Our World, 5th ed. McGraw Hill, 2023 Rationale: Use the same course material as Math100 course.

Other Resources

1. Other appropriate textbook as chosen by fulltime faculty