SECTION HEADING

MATH 0098: Higher Algebra I - Beginning Algebra

Description

Higher Algebra 1 teaches basic algebraic concepts and skills including real number properties, algebraic expressions, solving equations and inequalities, graphs of linear equations, exponents and scientific notation. This course is not considered a transfer course.

Credits

2

Prerequisite

Placement by multiple measures

Corequisite

None

Topics to be Covered

1. Properties of integers, real numbers and rational numbers, fractions and decimals, exponential notation and order of operations

2. Solving equations and inequalities, formulas and applications

3. Graphs of linear functions including the concepts of slope, intercepts, equations of lines and mathematical modeling

4. Properties of exponents including multiplying, dividing, raising a power to powerand scientific notation

Learning Outcomes

1. Evaluate and translate algebraic expressions

2. Perform operations with real numbers

3. Define and discuss properties of real numbers

4. Apply order of operations

5. Define a solution and determine if a value is a solution

6. Apply the addition and/or the multiplication principle to solve equations

7. Evaluate and rearrange formulas

8. Investigate the Cartesian Plane and plot points

9. Graph linear equations and determine the intercepts

10. Define and interpret the slope for an equation of a line

11. Evaluate exponential expressions

12. Perform multiplication, division and apply the power rule to exponents

13. Convert to and from scientific notation

14. Multiply and divide using scientific notation

15. Solve application problems using properties of real numbers and order of operations

16. Apply and manipulate formulas to determine their optimal application

17. Graph and interpret applied data

18. Use scientific notation to solve application problems

Credit Details

Lecture: 2

Lab: 0

OJT: 0

MnTC Goal Area(s): None