

## MATH 3

**Basic Skills** (3) Natural numbers; integers; rational numbers; decimals; ratio, proportion; percent; graphs; applications. Students who have passed MATH 001 may not schedule this course for credit. This course may not be used to satisfy the basic minimum requirements for graduation in any baccalaureate degree program.

### TOPICS

- (1) Addition, subtraction, multiplication, and division of whole numbers, including word problems
- (2) Powers and roots of whole numbers
- (3) Order of operations with whole numbers
- (4) Addition, subtraction, multiplication, and division of integers
- (5) Powers and roots of integers
- (6) Prime factorization; equivalent fractions; reducing fractions to lowest terms; conversion between mixed numbers and improper fractions
- (7) Multiplication and division of fractions
- (8) Lowest common denominator; addition and subtraction of fractions
- (9) Addition, subtraction, multiplication, and division of mixed numbers
- (10) Complex fractions

(11) Word problems involving fractions

(12) Conversion between fractions and decimals; rounding whole numbers and decimals

(13) Addition, subtraction, multiplication, and division of decimals

(14) Word problems involving decimals

(15) Operations with a mixture of fractions and decimals; comparing the size of fractions and decimals

(16) Use of ratios and rates; simplifying ratios and rates

(17) Solution of proportions; word problems involving ratio and proportion

(18) Conversion between fractions, decimals, and percent; solution of problems involving percent, including word problems and percent increase and decrease

(19) Interpretation of bar, line and circle graphs; word problems involving graphs, especially those involving ratio, proportion, and percent

(20) Conversions within English and metric systems of measurement; conversions between systems; word problems involving measurement

(21) Perimeter, area, and volume of geometric figures