# MGF-MATH-GENERAL & FINITE (MGF)

### MGF 1100 Introduction to Mathematical Thinking (3 Credits)

This course includes the study of problem-solving approaches, study skills and habits, finding patterns, sets of numbers and their properties, number sense, order of operations and arithmetic with signed numbers, inequalities in one variable, functions and interpreting graphs, solving linear equations, solving systems of linear equations graphically, and applications. This course does not satisfy the Gordon Rule requirements. Counted as elective college credit only.

## MGF 1106 Liberal Arts Math (3 Credits)

This course covers topics from set theory, logic, geometry and measurement, counting principles, probability, and statistics (including the normal curve).

General Education, Area IV: Mathematics

#### MGF 1107 Explorations In Math (3 Credits)

This is a survey course covering a selection of at least six (6) topics from among the following: consumer mathematics, linear and exponential growth, numeration systems, history of mathematics, number theory, voting techniques, graph theory, mathematical systems, non Euclidean geometries, linear correlation and regression, and similar topics which demonstrate the beauty and utility of mathematics to the general student population.

General Education, Area IV: Mathematics

## MGF 1130 Mathematical Thinking (3 Credits)

In this course, students will utilize multiple means of problem solving through student-centered mathematical exploration. The course is designed to teach students to think more effectively and increase their problem-solving ability through practical application and divergent thinking. This course is appropriate for students in a wide range of disciplines/programs. Student Learning Outcomes: -Students will determine efficient means of solving a problem through investigation of multiple mathematical models. -Students will apply logic in contextual situations to formulate and determine the validity of logical statements using a variety of methods. -Students will apply mathematical concepts visually and contextually to represent, interpret and reason about geometric figures. -Students will recognize the characteristics of numbers and utilize numbers along with their operations appropriately in context. -Students will analyze and interpret representations of data to draw reasonable conclusions.

General Education, Area IV: Mathematics

# MGF 1131 Mathematics in Context (3 Credits)

Through this course, students will experience the practicality of mathematics in global society. Students will engage in the applications of tools and techniques of mathematics in a variety of contextual situations from everyday life. This course is appropriate for students in a wide range of disciplines/programs.

General Education, Area IV: Mathematics