

# **Course Outcome Summary**

## **Standard Course**

# Math 159/Trigonometry and Analytical Geometry

Course Information	
Division	Science Mathematics
Contact Hours	45
Total Credits	3

#### Prerequisites

A grade of C or better in MATH 157 within the last three years is highly recommended.

#### **Course Description**

This course covers the topics of circular functions, trigonometric functions, inverse trigonometric functions, trigonometric identities, conic sections, polar coordinates, sequences and induction. Students will be expected to demonstrate the ability to work with mathematics numerically, graphically, analytically and verbally. The purpose of this course is to introduce students to college-level mathematics at a more gradual pace than MATH 164. MATH 159 is a continuation of MATH 157. MATH 157 and MATH 159 together are the equivalent of MATH 164.

### **Course Outcomes**

In order to evidence success in this course, students will be able to:

- 1. Use trigonometric functions to solve applied problems.
- 2. Solve and graph equations involving trigonometric functions algebraically and with a graphing calculator.
- 3. Utilize and verify trigonometric identities.
- 4. Perform operations with vectors and use them to solve applied problems.
- 5. Graph conics and parametric and polar equations.
- 6. Perform operations with sequences and series.

Updated: January 2023 James K Vallade