# MATH& 142: Precalculus II

## Credits 5

### **Quarter Offered** Winter, Spring

Conic sections; trigonometric functions; identities; inverse trigonometric functions; trigonometric equations; solutions of right triangles; laws of sines and cosines; vectors; polar coordinates; and complex numbers. This class may include students from multiple sections. (Quantitative Skills, Natural Sciences, Elective)

### **Prerequisites**

2.0 or higher in MATH & 141 or equivalent

#### **Course Outcomes**

Students who successfully complete this class should be able to:

Evaluate, analyze and graph trigonometric and inverse trigonometric functions.

Apply the triangular and circular definitions of the trigonometric functions.

Verify and apply trigonometric identities.

Solve trigonometric equations.

Analyze and graph conic sections, parametric equations, and polar equations.

Graph and perform basic operations with vectors.

Solve application problems.