### **MATH 1308**

### **Precalculus for Business Students**

Text: Mathematics with Applications in the Management, Natural, and Social Sciences, 13<sup>th</sup> Edition by Lial, Hungerford, Holcomb, and Mullins
Published by Pearson Learning Solutions

## **Detailed Course Description:**

### **Algebra and Equations**

The Real Numbers

**Polynomials** 

**Factoring** 

**Rational Expressions** 

**Exponents and Radicals** 

**First-Degree Equations** 

**Quadratic Equations** 

# **Graphs, Lines, and Inequalities**

**Graphs** 

**Equations of Lines** 

**Linear Models** 

**Linear Inequalities** 

**Polynomial and Rational Inequalities** 

## **Functions and Graphs**

**Functions** 

**Graphs of Functions** 

**Applications of Linear Functions** 

**Quadratic Functions and Applications** 

**Polynomial Functions** 

**Rational Functions** 

## **Exponential and Logarithmic Functions**

**Exponential Functions** 

**Applications of Exponential Functions** 

**Logarithmic Functions** 

**Logarithmic and Exponential Equations** 

### **Mathematics of Finance**

**Simple and Compound Interest** 

Annuities, Future Value, and Sinking Funds

### **Systems of Linear Equations and Matrices**

Systems of Two Linear Equations in Two Variables

**Larger Systems of Linear Equations** 

**Applications of Systems of Linear Equations** 

**Basic Matrix Operations** 

**Matrix Products and Inverses** 

**Applications of Matrices**