

# **COURSE SYLLABUS**

# MAT 155 College Algebra

**CREDIT HOURS:** 4.00

CONTACT HOURS: 60.00

# COURSE DESCRIPTION:

This course includes the solution of linear, quadratic and fractional equations and inequalities, lines, parabolas and circles are studied. The concept of function is presented and polynomial, rational, inverse, exponential and logarithmic functions are studied and graphed. The use of graphing technology or a computer algebra system is required.

#### PREREQUISITES: MAT 113, or by placement

#### **EXPECTED COMPETENCIES:**

Upon completion of this course, the student will demonstrate knowledge of:

- 1. Linear equations and inequalities
- 2. Quadratic equations and inequalities
- 3. Functions and graphs
- 4. Polynomial, rational, exponential and logarithmic functions and graphs
- 5. Systems of linear equations and inequalities
- 6. Matrices and determinants
- 7. An introduction to conic sections

# **ASSESSMENT METHODS:**

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

### **GRADING SCALE:**

90%-100% = A 80%-89.9% = B 70%-79.9% = C 60%-69.9% = D <60% = E