#### COURSE SYLLABUS

## MA 112, PRE-CALCULUS ALGEGRA

\*This information is to be completed by the instructor for the course.

### I. \*INSTRUCTOR INFORMATION

- A. Name:
- B. Office:
- C. Office Phone Number:
- D. E-mail Address:
- E. Office Hours:

#### II. COURSE INFORMATION

A. Course name, number, and credit hours: Pre-calculus Algebra, MA 112, 3 credit hours.

- B. \*Semester, Section number:
- C. \*Class meeting time (days, time, location):

D. Prerequisites: Minimum mathematics ACT score of 22 and credit in high school Algebra I, Algebra II, and Geometry; or grade of C or better in Intermediate Algebra.

E. Course Description: This course emphasizes the algebra of functions – including polynomial, rational, exponential, and logarithmic functions. The course also covers systems of equations and inequalities, quadratic inequalities, and the binomial theorem. Additional topics may include matrices, Cramer's rule, and mathematical induction.

- F. Course Objectives: The student shall demonstrate knowledge of
- 1. The basic concepts of arithmetic.
- 2. The basic concepts of algebra.
- 3. Elementary functions.

4. The sequential nature of mathematics and the interrelated nature of the various branches of mathematics.

5. Problem-solving strategies, which shall include reading and interpreting the problem, devising a plan to solve the problem, carrying out that plan, and reflecting on the reasonableness of the answer. Working problems backwards.

- 6. Estimation, prediction, and an ability to check answers.
- 7. Spatial relationships.

8. Standard mathematics vocabulary and symbols, and demonstrate the ability to use the language and symbols of mathematics accurately in communication.



The departmental final exam will count 25% of the final grade.

VI. GRADING SCALE

Grades will be assigned accordT596tothe ful712(o)-3(w)8(i)-7(n)21.04 Tonsc(n)-2(4)7(717(e)-1:L

# IX. UNIVERSITY POLICIES

#### B. Communication:

The official method of communication at UNA is UNA portal, with emphasis placed on University email.

C. Disability Accommodations: