

## COURSE SYLLABUS

### MA 115, PRE-CALCULUS ALGEBRA AND TRIGONOMETRY

\*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 and Trigonometry, MA115, 4 Semester Hours
- B. \*Semester, Section number
- C. \*Class meeting time (days, time location):
- D. Prerequisites: Minimum (math) ACT score of 22 and credit in high school Algebra I, Algebra II, and Geometry; or a grade of C or better in MA112.
- E. Course Description: This course is a one-semester combination of Pre-Calculus Algebra and Pre-Calculus Trigonometry intended for superior students.
- F. Course Content: Algebra of functions (including polynomial, rational, exponential, and logarithmic); systems of equations and inequalities; quadratic and rational inequalities; the binomial theorem; trigonometric and inverse trigonometric functions (including work with identities and equations); vectors; complex numbers; DeMoivre's Theorem; polar coordinates.
- G. Course Objectives:
  - Students shall demonstrate knowledge of arithmetic, the basic concepts of algebra and elementary functions.
  - Students will gain understanding and a working knowledge of trigonometry.
  - Students will learn the sequential nature of mathematics and the interrelated nature of the various branches of mathematics.

- Students will develop 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.
- Students will gain experience with estimation, prediction, and an ability to check answers.
- Students will become fluent in standard mathematics vocabulary and symbols, and demonstrate the ability to use the language and symbols of mathematics accurately in communication.
- Students will present and interpret data in graphical form and envision spatial relationships.
- Students will select or create appropriate mathematical models to solve problems in mathematics and in other disciplines and integrate problem solving strategies learned in mathematics into the solution of problems encountered in daily living.

### III. TEXTBOOK AND SOFTWARE

A. Textbook: *Algebra & Trigonometry* by Blitzer, 5th ed.

NOTE: The homework will be done on the computer, using the MyMathLab (MML) software. The MML software is REQUIRED for this class. The text is included as an electronic version in the MyMathLab subscription. YOU DO NOT NEED TO PURCHASE A BOOK SEPARATELY unless you want the print version.

B. Software: MyMathLab (Standalone access code)

C. \*Calculator Policy

### IV. ACCOMMODATIONS

In accordance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973, the University offers reasonable accommodations to students with eligible documented learning, physical and/or psychological disabilities. Under Title II of the Americans with Disabilities Act (ADA) of 1990, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Amendment Act of 2008, a disability is defined as a physical or mental impairment that substantially limits one or more major life activities as compared to an average person in the population. **It is the responsibility of the student to contact Disability Support Services to initiate the process to develop an accommodation plan.** This accommodation plan will not be applied retroactively. Appropriate, reasonable accommodations will be made to allow each student to meet course requirements, but no fundamental or substantial alteration of academic standards will be made. Students needing assistance should contact Disability Support Services (256-765-4214).

## **V. ACADEMIC HONESTY POLICY**

Students are expected to be honorable and observe standards of conduct appropriate to a community of scholars. Additionally, students are expected to behave in an ethical manner. Individuals who disregard the core values of truth and honesty bring disrespect to themselves and the University. A university community that allows academic dishonesty will suffer harm to the reputation of students, faculty, and graduates.

Incidents of possible student academic dishonesty will be addressed in accordance with the guidelines found at the following link:

**<http://www.una.edu/student-conduct/policies-and-procedures/academic-honesty.html>**

## **VI. ATTENDANCE POLICY**

Regular and punctual attendance is expected of all students. Whenever a student's cumulative absences for any reason – excused or unexcused – exceed the equivalent of three weeks of scheduled classes, no credit may be earned for the course. The student will either withdraw from the course or receive an F for the course grade. Any exceptions to this policy will be in accordance with University policy.

## **VII. \*FINAL EXAM**

Include date, time, and location.

The Final Exam is COMPREHENSIVE and will count for 25% of the final grade.

## **VIII. GRADING SCALE**

Grades will be assigned according to the following scale:

A	90% – 100%
B	80% – 89%
C	70% – 79%
D	60% – 69%
F	Below 60%

## **IX. \*GRADING PLAN**

\*Include information on the number and type of evaluation methods (exams, quizzes, labs, homework, papers, etc.) with point or percentage values for each.\*  
The Final Exam will count for 25% of the final grade.

## **X. \*GENERAL COMMENTS BY INSTRUCTOR**