**COURSE SYLLABUS**

**Pre-Calculus**

 **TEXTBOOK:** PRE CALCULUS: Graphical, Numerical, Algebraic

8th Edition (Demana Waits Foley Kennedy) 2011

 **SEMESTER ONE DUAL CREDIT SPECIFIC OBJECTIVES**

 Upon completion of the course the learner will be able to:

1. Students will demonstrate an understanding of relations and functions as evidenced by classroom activities and objective tests.

2. Students will be able to work with equations and inequalities as evidenced by classroom activities and objective tests.

3. Students will be able to work with complex numbers as evidenced by classroom activities and objective tests.

4. Students will be able to work with rational and polynomial expressions as evidenced by classroom activities and objective tests.

5. Students will be successful in working with exponential and logarithmic functions as evidenced by classroom activities and objective tests.

6. Students will be able to solve systems of linear equations as evidenced by classroom activities and objective tests.

7. Students will be able to work with angular measure in both degrees and radians as evidenced by classroom activities and objective tests.

8. Students will be able to work with trigonometric and inverse trigonometric functions as evidenced by classroom activities and objective tests.

9. Students will be able use trigonometric identities as evidenced by classroom activities and objective tests.

10. Students will be able to solve trigonometric equations as evidenced by classroom activities and objective tests.

11. Students will demonstrate an understanding of how to solve real world problems using trigonometry as evidenced by classroom activities and objective tests.

**AREAS OF STUDY:**

 **Semester One**

 1) Functions and Graphs

 2) Polynomial, Power, and Rational Functions

 3) Exponential, Logistic, and Logarithmic Functions

4) Trigonometric Functions

5) Analytic Trigonometry

 **Semester Two**

6) Applications of Trigonometry

 7) Systems and Matrices

8) Analytic Geometry in Two and Three Dimensions

 9) Discrete Mathematics

 10) An Introduction to Calculus: Limits, Derivatives, and Integrals

 **EVALUATION:**

Your grade will be comprised of quizzes, chapter tests and some projects. The largest part of your grade in Pre-Calculus will come from tests/quizzes. It is my expectation that a test or quiz be completed during the class time allotted**. Homework will not be taken for a grade, but if you are doing the homework and taking part in class it will show on your assessments**. I will collect all homework for a unit on the day we have out test/quiz on that unit, to see if each student is doing what they should be doing to learn the material. Retakes are available for students who score below a B (84%), but only if all homework has been turned in on time. Any retakes must be taken within one week of the original test/quiz. When retaking a test/quiz, the highest score possible will be a low B (84%).

 **GRADING SCALE:**

 A 92-100%

 B 84-91%

 C 75-83%

 D 65-74%

 E 0-64%