**Course Description:**

***Goals / Objectives:***

The **Trigonometry** course deals with the relationships of triangles and the theory of the periodic functions connected with them. Trigonometry is a basic tool used in the development of mathematics and many sciences. The concepts studied will have applications in surveying, navigation, engineering, physics, and chemistry. Students will learn to model real-life problems mathematically by utilizing plane trigonometry.

The **Trigonometry** course will also employ computer technology to access assisted instructional units for enrichment and to research, analyze, and calculate trigonometry problems that address other disciplines in both the natural and physical sciences. Students who complete the **Trigonometry** course shall be prepared to continue their studies with calculus and other advanced mathematics.

***Modes of Assessment:***

**Written Tests:**

Written tests will be administered periodically in order to assess the students’ knowledge of topics within Trigonometry.

**Homework Assignments:**

The importance of homework is to be emphasized in this course. Homework is given on a regular basis and students are to complete the assignments in a thorough manner. Homework is given to develop skills taught in class and benefits the student, and is therefore not optional.

**Projects:**

In order to fully implement the concept of Trigonometry, application is essential. Therefore, students will be expected to perform in-depth research and create projects on topics assigned. This component of the course will be conducted on an individual or group basis.

**Class Work/Activities:**

Students are expected to actively and respectfully participate in all activities and assignments. Courtesy, consistency and work ethic are major factors in grading these activities.

**Oral Presentations:**

Students will be expected to present topics that will adequately demonstrate their understanding of Trigonometry concepts.

***Grading Scale:***

A = 90 to 100%

B = 80 to 89%

C = 70 to 79%

D = 60 to 69%

F = 0 to 59%

***Course Evaluations:***

Averages for each quarter shall be determined as follows:

Major Grades (tests, projects, portfolio)...…….…60%

Minor Grades (quizzes, homework, notebook)...40%

***Text:***

Advanced Mathematical Concepts: Trigonometry and Analytical Geometry

***Intended Course Outline:***

**All** students enrolled in the **Trigonometry** course will study the following Units:

1. Use trigonometry functions to solve right triangle problems.

2. Solve trigonometric equations.

3. Graph the six trigonometric functions.

4. Use the unit circle to define the six trigonometry functions.

5. Solve oblique triangles using other methods.

6. Use and graph the inverse trigonometry functions.

7. Trigonometric identities and formulas.

8. Complex numbers and polar coordinates.

**Classroom Rules:**

* **WE WILL RESPECT ONE ANOTHER**
  + Course language is unacceptable
  + Inappropriate physical contact is unacceptable
* **WE WILL BE PUNCTUAL**
  + Be in room and on task on time everyday
* **WE WILL BE PREPARED**
  + Bring text, paper, pencil and eraser everyday
* **WE WILL BE PROFESSIONAL**
  + Stay seated and working
  + Quietly raise hands for help
  + Maintain quiet room for everyone’s benefit
  + Dress according to school codes
  + Damage or destroy nothing
  + Do not leave seats or room until officially dismissed

**Consequences:**

* VERBAL WARNING
* LOSS OF BONUS POINTS
* REFERRAL AND PARENTAL NOTIFICATION
* PRINCIPAL DISCIPLINARY ACTION(S)
* *Consequences may not always occur in this order. Disturbances will result in appropriate consequences*.

**Parents:**

If you have any questions or concerns about your student’s achievement, or if there is anything that I should know that might help me to teach your student, please feel free to contact me [gregory.taylor@slps.org](mailto:gregory.taylor@slps.org) throughout the school year.

I am here to prepare your child for college and/or the adult working environment. Good citizenship is highly emphasizes and factored in the grades using cooperative activities, peer and self assessments. Whether this is a freshman or up to a senior level course, citizenship and work ethic shall be emphasized and expected. Any help you might offer will be greatly appreciated and utilized. Thank you.

Finally there is an expectation that you will assume the responsibility of maintaining a current phone number with me, or the main office, to ensure my ability to contact you with issues of concern, or excellence, as necessary throughout the year.

I have read and understand the rules and regulations for Mr. Taylor’s class:

***Parent phone for immediate discretionary contact: ( ) -***

Parent Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Print Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_\_\_

Returning this portion of the syllabus document completed and signed in a prompt manner is the ***first assignment*** of the year and ***does carry point value*** for your student grade. Failure to complete this will result in a PAN *(parental appearance notification).* Thank you for all of your support.