**Course Description:**

***Goals / Objectives:***

The **Advanced Algebra Double Dose** course deals with the relationships of triangles and the theory of the periodic functions connected with them. Algebra 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 various mathematical strategies.

This course will also employ computer technology to access assisted instructional units for enrichment and to research, analyze, and calculate various mathematical and science reasoning problems that address various disciplines in both the natural and physical sciences. Students who complete this course shall be prepared to perform at higher levels on the ACT and EOC test, which will improve the opportunity to be accepted by a multiplicity of colleges or universities and potentially garner scholarship funds as a result.

***Modes of Assessment:***

**Written Tests:**

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

**Electronic Tests:**

Various web based resources will be employed both as self assessment or improvement and as grading evaluations for this class.

**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.

**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 mathematical concepts.

***Textbook:***

**All textual materials are contained within class as a classroom set.**

***Intended Course Outline:***

To view a complete topical overview, click the link to see the [Class Webpage](http://math-science.weebly.com/algebra-2-double-dose-unit-1.html). We will begin the year with a “**Review and Preview”** of previous mathematical concepts.

**All** students enrolled in the **Adv Algebra DD** course will study the following content:

1. Use trigonometry functions to solve right triangle problems.

2. Solve trigonometric equations.

3. Graphing various functions through conic sections.

4. Applying mathematical modeling to solve multi step problems.

5. Analyzing and solving various polynomial functions and relationships.

6. Reading graphs, tables and charts to glean and analyze data.

7. Infer and deduce concepts from complex written passages.

8. Identify and strategize regarding mathematical and scientific problems.

***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:

**Class work – 40%**

* Labs, Projects, Independent Work, Research Assignments, Presentations

**Assessments – 35%**

* Quizzes, Tests, Final Exams, Benchmarks, EOC exams, AP exams

**Participation – 15%**

* Do Now, Journals, Discussion Posts, Exit Slips, Leadership Roles

**Homework – 10%**

**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. Electronic copy of the syllabus is available at: <http://math-science.weebly.com/adv-algebra-dd-syllabus.html>

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 \_\_\_\_\_\_\_\_\_\_\_\_

By signing above ALL parties agree to abide by the technology acceptable usage criteria for both the SLPS district and Carnahan HSOF. Any infraction can result in the above student losing ALL technology privileges for the remainder of the school year.

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.

Gregory L. Taylor - BS, MS, EdD.