**Syllabus**

Advanced Algebra 3-4 (NCES# 2041)

Cleveland High School

Room

*Instructor*: Ian Maurer

*Email*: imaurer@pps.net

*Course Description*:

This course includes the following topics:graphs and transformations, inverses, exponents and logarithms, trigonometric functions, polynomials and complex numbers and statistics..

Students will complete a state required work sample for Algebraic Relationships and Statistics.

The requirements of students with special needs will be addressed appropriately when they arise. Proper actions as suggested by 504 plans will be taken. These may include preferential seating, adjusted times and monitoring student planners. If a student finds the class material not challenging, they, with my help, may develop appropriate alternative assignments.

*Learning objectives:*

* Students will become proficient in the use of basic Algebraic concepts in problem solving.
* Students will apply learned concepts to real-world issues and explain the role of modeling in understanding these issues.
* Students will effectively communicate about abstract concepts and applications.

*Schedule of topics/units covered:*

* **First Quarter**:

Creating and solving equations

Function graphs and transformations

Inverse functions

* **Second Quarter**

Exponents and Logarithms

* **Third Quarter**

Trigonometric Functions

Polynomials

* **Fourth Quarter**

Complex Number

Statistics

*Grade Policy:*

* **Proficiency Based Assessment:** Because the course is designed to prepare students for additional coursework, students will be graded based on their mastery of concepts. Students will demonstrate their mastery of concepts through formal assessment (either written or oral) that may take the form of a quiz, test, presentation or project. Assessments can be retaken as many times as needed for a student to demonstrate mastery of a concept.
* **Homework:** Homework is used to help prepare students for assessments. Homework is not graded. Practice problems are recommended for each concept and students will be required to complete additional problems in order to retake any skill.
* **Proficiency Scoring:** Assessments will be scored using the following scale:

7 = In addition to score 6 performance, demonstration of inferences and applications that go beyond what was taught

6 = In addition to score 5 performance, partial demonstration of inferences/applications that go beyond what was taught.

5 = No major errors/omissions of any of the information and/or processes (simple or complex) that were explicitly taught.

4 = No major errors/omissions of simpler details/processes; partial demonstration of more complex ideas/processes.

3 = Partial demonstration of simpler details/processes; major errors/omissions regarding more complex ideas/processes.

2 = Limited demonstration of the simpler details/processes; either major errors/omissions or needs help on the more

complex ideas/processes.

1 = With help, partial understanding of some of the simpler ideas and processes demonstrated.

0 = Even with help, no understanding or skill demonstrated.

* **Skill Scores:**  At the end of each grading period, students will receive a skill score for each concept covered during the term (note: each concept will be assessed several times during a term). The skill score will be the median of the three most recent scores on that concept, including retakes.
* **Grading:**

**A:**  *Skill scores averaging 6 or higher with no skill scores lower than 5.*

**B:** *Skill scores averaging 5 or higher with no skill scores lower than 4.*

**C:** *Skill scores averaging 4 or higher with no skill scores lower than 3.*

**D:** *Skill scores averaging 3 or higher with no skill scores lower than 2*

**INC:** *One skill score of 2 or lower*

**F:** *Two or more skill scores of 2 or lower.*

*Behavioral expectations:*

* Come to class on time prepared to work and with assignments completed.
* Keep all personal electronics in your backpack at all times during class. I will confiscate any non-academic electronic items without warning.
* Be respectful to all others in the classroom. Harassing behavior of any sort will not be tolerated.

*Consequences:*

* 1st offense - Conference with teacher
* 2nd offense - Contact home, conference with parents/guardians
* 3rd offense - Referral to administration, conference with student, teacher, and admin.

*Textbooks*: College Preparatory Mathematics: Algebra 2 Connections

*Instructor Schedule:*

If you need help outside of class, please make an appointment as early as possible.

* Period 1: CCSS Algebra 3/4
* Period 2: CCSS Algebra 3/4
* Period 3: Prep
* Period 4: Bridges to Advanced Algebra
* Period 5: Prep
* Period 6: Bridges to Advanced Algebra
* Period 7: Bridges to Advanced Algebra
* Period 8: CCSS Algebra 3/4

1 “Accommodation” means an alteration in how a test is presented to or responded to by the person tested; it includes a variety of alterations in presentation format, response format, setting in which the test is taken, timing or scheduling. The alterations do not substantially change level, content or performance criteria. The changes are made in order to provide a student equal access to learning and equal opportunity to demonstrate what is known. For student with disabilities, accommodations may be stated on the student’s individualized education plan (IEP).