



# Southern Lehigh School District

High School Syllabus

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## APPLIED ALGEBRA 2

2013-2014

### Course Description:

The students' background in mathematics is considered in determining appropriate instructional techniques and classroom applications in APPLIED ALGEBRA II. The APPLIED ALGEBRA II curriculum includes many of the topics presented in ALGEBRA II, but not in the same depth or at the same pace. Topics include: linear equations and systems, matrices, probability & statistics, factoring, radicals and relations and functions. A scientific calculator is required for this course.

### Course Content:

This course is designed to cover the basic concepts of Algebra II. Topics include:

- Linear Functions, Systems and Sequences and Series
- Exponents
- Exponential
- Quadratic Functions
- Radicals and Complex Numbers
- Higher Order Polynomials
- Continuous and Discontinuous
- Functions, Relations, and Inverses
- Periodic Functions
- Probability
- Matrices
- Function Transformations

### Required Textbooks and/or Other Reading/Research Materials

Algebra II content will be delivered in a blended course format, with a combination of collaborative, student-centered textbook lessons and adaptive Cognitive Tutor software lessons.

### Course Requirements:

Each student is required to complete all tests, projects and assignments. Failure to do so will affect the student's overall grade.

Grade Components/Assessments:

Grades will be based on a point system that will be converted to overall percentages. The following methods will be used, for the year, to assess and evaluate student performance:

Assessments (Tests, Quizzes, Alternative Assessments): 40-50%

Homework: 25-30%

Class Participation, Cognitive Tutor: 25-30%

Each marking period is worth 20% of a student's overall grade. The midterm and final exam are each worth 10% of a student's overall average:

|                |            |
|----------------|------------|
| Quarter 1      | 20%        |
| Quarter 2      | 20%        |
| <b>Midterm</b> | <b>10%</b> |
| Quarter 3      | 20%        |
| Quarter 4      | 20%        |
| <b>Final</b>   | <b>10%</b> |

Required Summer Reading/Assignments:

None.