

**Dorchester County Public Schools
Mathematics Syllabus**

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ROOM NUMBER: A211
CLASS LENGTH: 90 minutes

Class Title:
Algebra II

Course Description:

Building on their work with linear, quadratic, and exponential functions in Algebra I, students extend their knowledge of functions to include polynomial, rational, and radical functions. Students work closely with the expressions that define the functions and continue to expand and increase their Algebra skills to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. The Mathematical Practice Standards apply throughout, and together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. There are four critical areas covered: Polynomial, Rational, and Radical Relationships; Trigonometric Functions; Modeling with Functions; and Inferences and Conclusions from Data. Prerequisite: Algebra I or Intensified Algebra

Units of Study:

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| • Unit 1: Sequences and Functions | 1-2 weeks |
| • Unit 2: Polynomials and Rational Functions | 2-3 weeks |
| • Unit 3: Complex Numbers and Rational Exponents | 1-2 weeks |
| • Unit 4: Exponential Functions and Equations | 1-2 weeks |
| • Unit 5: Transformations of Functions | 1-2 weeks |
| • Unit 6: Trigonometric Functions | 3-4 weeks |
| • Unit 7: Statistical Inferences | 2-3 weeks |

Grading Policy:

All grading will be in accordance to the DCPS grading policy.

Note: Pre-Tests and Tests (Summative assessments) will be assigned for every unit.

Expected Student Behaviors:

In Dorchester County Public Schools all students are expected to:

- Engage in learning activities and take school work seriously
- Be courteous
- Attend school regularly, on time, and prepared to learn
- Cooperate with others
- Take responsibility for their own behavior
- Complete assignments on time
- Speak appropriately
- Exhibit self-control
- Behave ethically