

Course Overview

Content Area:
Course(s):
Time Period: **Year**
Length: **180**
Status: **Published**

Course Overview
<p>Aligned to Standards: NJSLS 2023</p> <p>Revision Date: 2024</p> <p>In compliance with the NJ Student Learning Standards, climate change, career readiness, DEI (Diversity, Equity, & Inclusivity), as well as other standards have been integrated within the NBCRSD curricula (NJ Administrative Code Title 6A: chapter 8; Title 18A: chapter 35).</p>
Course Overview
Sequence- Unit Titles, Summaries, and Number of weeks per unit (total = 18 semester/36 year)
<p>Unit 1: Linear Functions - 5 block days ~ 2 weeks</p> <ul style="list-style-type: none">○ Students will be able to solve systems of linear equations in two and three variables. Students will solve real world problems using systems of linear equations in three variables. Finally, students will be able to describe relationships between two quantities that vary and know functions are a way to represent and work with real life situations. <p>Unit 2: Quadratic Functions - 15 block days ~ 6 weeks</p> <ul style="list-style-type: none">○ Students will be able to solve systems of linear equations in two and three variables. Students will solve real world problems using systems of linear equations in three variables. Finally, students will be able to describe relationships between two quantities that vary and know functions are a way to represent and work with real life situations. <p>Unit 3: Polynomial Functions - 12 block days ~ 5 weeks</p> <ul style="list-style-type: none">● Perform operations with polynomials● Analyze and graph polynomial functions● Evaluate polynomial functions and solve polynomials equations● Find factors and zeros of polynomial functions <p>Unit 4: Inverse & Radical Functions - 9 block days ~ 4 weeks</p> <ul style="list-style-type: none">○ Students will be able to graph, perform operations and solve radical functions. Students will also find an inverse of a function and determine whether two functions

are inverses.

Unit 5: Logarithmic Functions - 8 block days ~ 4 weeks

- Students will be able to independently use their learning to Manipulate exponential and logarithmic functions to solve problems.

Unit 6: Rational Functions - 10 block days ~ 4 weeks

- Students will be able to perform operations with rational functions and graph and solve rational functions using their asymptotes, zeroes, intercepts, vertice

Unit 7: Trigonometric Functions - 7 block days ~ 3 weeks

- Students will be able to find values of trigonometric functions via the unit circle, right triangles and the Laws of Sines and Cosines

Unit 8: Probability & Statistics - 7 block days ~ 3 weeks

- Students will be able to independently use their learning to Evaluate surveys, studies and experiments, create and use graphs of probability distributions and compare sample statistics and population statistics.

Unit 9: Sequences & Series - 7 block days ~ 3 weeks

- Students will be able to independently use their learning to Determine terms in sequences and series, write and evaluate sigma problems (the summation symbol), use the binomial theorem and Pascal's triangle to generate binomial coefficients for certain types of sequences & series

Remainder - NJGPA/NJSLA testing ~ 2 weeks

[Reporting Student Progress](#) (link to NB's Assessment System)

All courses follow a balanced assessment system with Practice and Assessments. Each category includes formative, summative and alternative assessments.

[Accommodations and Modifications](#) (link to menu)

Integrated accommodations and modifications for special education students, English language learners, students at risk of school failure, gifted and talented students, and students with 504 plans.