

Transition to College Mathematics (9360) Course Overview Curriculum Document

Course Description

This course is for college bound students who need another year of math to improve their algebraic abilities and plan to take a math course in College, such as College Algebra or Trigonometry. This course will enhance the student’s higher level thinking skills developed in Algebra 2 through a more in-depth study of those concepts and exploration of some pre-calculus concepts. Students will be challenged to increase their understanding of algebraic, graphical and numerical methods to analyze functions; and use trigonometry.

Credits	Prerequisites
1	9100 Algebra, 9200 Geometry, and 9260 Algebra 2
Board Approved	Revised
April 1999, March 2019, June 2023	February 2019, June 2023

Required Assessments

District Common Summative Assessments

Textbooks/Resources

Lial, Margaret L. (2016). Algebra and Trigonometry for College Readiness. Boston: Pearson. Student Edition ISBN: 978-0-13-399335-6
Teacher Edition ISBN: 978-0-13-399403-2

Course Essential Understandings

As a result of successfully completing this course, students will understand:

- Notation can be used to convey mathematical concepts
- Algebra concepts are interrelated
- Application of rules to simplify expressions and number systems
- Equations and graphs are connected
- Formulas and geometric shapes are related

Course Relevance Questions

- Can we develop and apply relationships and patterns to solve both Algebraic and Geometric problems?

Unit Overviews

Unit Name	Unit Description	Unit Relevance Question	Instructional Standards	Assessed Standards
Unit 1: Simplifying	In this unit students will build foundational knowledge and vocabulary to work with real number systems, exponents, polynomials, roots, radicals, logs, and imaginary numbers.	How do you simplify an algebraic expression? How do you use notation to convey an answer?	I.1: Interpreting M.1: Manipulating/ Evaluating	I.1: Interpreting M.1: Manipulating/ Evaluating
Unit 2: Solving	Students will build on their knowledge of Unit 1 to solve a variety of equations and inequalities.	How many solutions can you determine from the following statement?	I.2: Interpreting M.2: Manipulating/ Evaluating S.2: Solving	I.2: Interpreting M.2: Manipulating/ Evaluating S.2: Solving
Unit 3: Geometry	In this unit students will use geometric relationships to determine additional information about a triangle and other geometric figures.	How can you determine the missing angles and sides?	I.3: Interpreting M.3: Manipulating/ Evaluating S.3: Solving	I.3: Interpreting M.3: Manipulating/ Evaluating S.3: Solving
Unit 4: Coordinate Plane	In this unit students will understand the characteristics of a function.	What can you determine from a graph?	I.4: Interpreting M.4: Manipulating/ Evaluating S.4: Solving	I.4: Interpreting M.4: Manipulating/ Evaluating S.4: Solving