

Elk Grove Charter School

Math 3*

Course Requirements and Syllabus

Course #3035 10 Credits

Text

Integrated Mathematics 3, Houghton Mifflin Harcourt

Course Description

This course is the third course in a series of three that uses an integrated approach to cover the following domains: Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability. This course focuses on four major areas: (1) Expanding the understanding of functions to include polynomial, rational, and radical functions, (2) Expanding right triangle trigonometry to include general triangles, (3) Applying methods from probability and statistics to draw inferences and conclusions from data, and (4) Consolidating functions and geometry to create models and solve contextual problems. **Prerequisite(s): Mathematics II or**

Mathematics II Honors with a grade of C or better.

Course Note*

For students who are taking fewer than 10 credits, complete Unit 1 – Unit 6 first (regardless of the previous credits completed).

Mathematical Practice Standards

Standard 1 Make sense of problems & persevere in solving them.

Standard 2 Reason abstractly & quantitatively.

Standard 3 Construct viable arguments & critique others' reasoning.

Standard 4 Model with mathematics.

Standard 5 Use tools strategically.

Standard 6 Attend to precision.

Standard 7 Make use of structure.

Standard 8 Express regularity in reasoning.

Unit Overview

Unit	Module	Lesson	Interventions	Assessment
Each "unit" is 0.5 to 2 credits (7.5 to 30 hours of work).	Each unit is divided into several "modules," which are collections of lessons about the same topic.	Each "Lesson" is divided into 4 sections: <ul style="list-style-type: none"> • Explore • Explain • Elaborate • Evaluate* You must complete EACH section of EACH lesson indicated to complete your homework. *For EVALUATE, only odd-numbered problems are required.	Reteach worksheets and reviews are available as interventions for students who are unable to pass the test. See your ISP teacher for the supplemental worksheets.	Every unit has a test. The unit tests are summative short answer tests. 1 Performance Task is assigned as the midterm, and 1 is assigned as the final. These are SBAC-aligned.

Assignment Rubric:

	5	4	3	2	1
Completeness	90-100% of ALL assignments completed	At least 80% of ALL assignments completed	At least 60% of ALL assignments completed	At least 40% of ALL assignments completed	At least 20% of ALL assignments completed
Accuracy	90-100% of ALL assignments correct	At least 80% of ALL assignments correct	At least 60% of ALL assignments correct	At least 40% of ALL assignments correct	At least 20% of ALL assignments correct

Assignments

Unit	Credits	Book Assignment	Assessment
1 Methods for Reasoning with Geometry	1.5	MODULE 1 CONSTRUCTIONS ·1.1 ·1.2 ·1.3 ·1.4 MODULE 2 COORD. PROOF W/SLOPE AND DIST. ·2.1 ·2.2 ·2.3 ·2.4 ·2.5	Unit 1 Test Methods for Reasoning with Geometry
2 Measurement and Modeling in Two and Three Dimension	1	MODULE 3 VISUALIZING SOLIDS ·3.1 ·3.2 ·3.3 ·3.4 MODULE 4 MODELING AND PROBLEM SOLVING ·4.2 ·4.3	Unit 2 Test Measurement and Modeling in Two and Three Dimension
3 Polynomial Functions, Expressions, and Equations	1.5	MODULE 5 POLYNOMIAL FUNCTIONS ·5.1 ·5.2 ·5.3 ·5.4 MODULE 6 GRAPHING QUADRATIC FUNC. ·6.1 ·6.2 ·6.4 ·6.5 MODULE 7 POLYNOMIAL EQUATIONS ·7.1	Unit 3 Test Polynomial Functions, Expressions, and Equations
4/5 Rational/Radical Functions, Expressions, and Equations	1	MODULE 9 RATIONAL EXPRESS. AND EQUA. ·9.3 MODULE 10 RADICAL FUNCTIONS ·10.1 ·10.2 ·10.3 MODULE 11 RADICAL EXPRESSIONS AND EQUA. ·11.1 ·11.2 ·11.3	Unit 4/5 Test Rational/Radical Functions, Expressions, and Equations
Midterm (Cumulative)	--	--	Performance Task 1
6 Exponential and Logarithmic Functions and Equations	2	MODULE 12 SEQUENCE AND SERIES ·12.1 ·12.2 ·12.3 MODULE 13 EXPONENTIAL FUNCTIONS ·13.1 ·13.2 ·13.3 ·13.4 MODULE 15 LOGARITHMIC FUNCTIONS ·15.1 ·15.2 MODULE 16 LOG PROPERIES AND EXP. EQUA. ·16.1 ·16.2	Unit 6 Test Exponential and Logarithmic Functions and Equations
7 Trigonometric Functions	1.5	MODULE 18 UNIT-CIRCLE DEF. & TRIG FUNCT. ·18.1 ·18.2 ·18.3 MODULE 19 GRAPH TRIG FUNCTIONS ·19.1 ·19.2 ·19.3	Unit 7 Test Trigonometric Functions
8 Statistics and Decision Making	1	MODULE 20 GATHER/DISPLAY DATA ·20.1 ·20.2 MODULE 21 DATA DISTRIBUTIONS ·21.1 ·21.2	Unit 8 Test Statistics and Decision Making
9 Properties of Circles	0.5	MODULE 26 EQUA. OF CIRCLE AND PARABOLA ·26.1 ·26.2	Unit 9 Test Properties of Circles
Final (Cumulative)	--	--	Performance Task 2