

FOLSOM CORDOVA UNIFIED SCHOOL DISTRICT



Integrated Math 1

Board Approval Date: January 18, 2024	Course Length: 2 Semesters
Grading: A-F	Credits: 5 Credits per Semester
Proposed Grade Level(s): 9, 10	Subject Area: Mathematics Elective Area (if applicable):
Prerequisite(s): none	Corequisite(s): N/A
CTE Sector/Pathway:	
Intent to Pursue 'A-G' College Prep Status: Yes	
A-G Course Identifier: (c) Mathematics	
Graduation Requirement: Yes	
Course Intent: Site Specific Program (if applicable):	
The Folsom Cordova Unified School District prohibits discrimination, intimidation, harassment (including sexual harassment) or bullying based on a person's actual or perceived ancestry, color, disability, race or ethnicity, religion, gender, gender identity or gender expression, immigration status, national origin, sex, sexual orientation, or association with a person or group with one or more of these actual or perceived characteristics. For concerns/questions or complaints, contact the Title IX Coordinator(s), Equity Compliance Officer(s) and Section 504 Coordinator(s) : Donald Ogden, Associate Superintendent – Human Resources, Title IX Coordinator (Employees) & Equity Compliance Officer dogden@fcusd.org 916-294-9000 Ext 104410 Jim Huber Ed. D., Assistant Superintendent – Educational Services, Title IX Coordinator (Students), Section 504 Coordinator & Equity Compliance Officer jhuber@fcusd.org 916-294-9000 Ext 104625	

COURSE DESCRIPTION (Online):

This first-year high school integrated math course focuses on linear and simple exponential models. The course contrasts linear behavior with exponential behavior and uses both linear and simple exponential equations as models. Students learn about and work extensively with functions—analyzing function properties and behavior, creating and transforming functions, and applying functions to various continuous and discrete situations. The statistics in the course cover both univariate and bivariate data. For univariate data, students learn about measures of center and spread. For bivariate data, they learn about correlation and fitting data to a line. The topics in geometry include transformations, reasoning, congruence, construction, and analytic geometry.

DETAILED UNITS OF INSTRUCTION:

Unit Number/Title	Unit Essential Questions	Examples of Formative Assessments	Examples of Summative Assessment
Semester 1			
1. Expressions and Problem Solving	This unit focuses on variables and algebraic expressions. Students practice translating real-world situations into mathematical expressions and equations and use units to understand problems. In addition, students learn how the structure of a mathematical expression explains the relationships between the quantities in the real-world context it models.	*Online or paper-based worksheets and practice sets *Quizzes *Threaded discussions	*Exams (unit, semester and final) *Essays, research papers, and other writing assignments *Presentations
2. One-Variable Linear Equations and Inequalities	This unit is about single variable equations and inequalities. Students learn how to solve equations and extend this skill to solving inequalities and real-world applications involving inequalities. Students also use mathematical reasoning to justify each step when solving an equation or	*Online or paper-based worksheets and practice sets *Quizzes *Threaded discussions	*Exams (unit, semester and final) *Essays, research papers, and other writing assignments *Presentations

	inequality.		
3. Two-Variable Linear Equations and Inequalities	In this unit, students graph linear equations in two variables and use graphs to solve real-world problems. Students also graph linear inequalities in two variables.	*Online or paper-based worksheets and practice sets *Quizzes *Threaded discussions	*Exams (unit, semester and final) *Essays, research papers, and other writing assignments *Presentations
4. Working with Functions	In this unit, students learn about functions, use function notation to write function equations, and learn how to transform linear functions. The transformations include translations, reflections, stretches, and compressions. Students will find and interpret intercepts and learn how the domain and range of a function relate to the real-world situation it models. In addition, students will work with absolute value functions.	*Online or paper-based worksheets and practice sets *Quizzes *Threaded discussions	*Exams (unit, semester and final) *Essays, research papers, and other writing assignments *Presentations
5. Systems of Equations and Inequalities	This unit is about systems of equations and inequalities. Students learn how to solve systems graphically, how to classify systems, and how to approximate solutions with graphs. Students also learn how to solve using a graph and table, as well as the substitution method. Students also learn about linear combination and adding or subtracting equations, combination with multiplication, and using systems in the real	*Online or paper-based worksheets and practice sets *Quizzes *Threaded discussions	*Exams (unit, semester and final) *Essays, research papers, and other writing assignments *Presentations

	world. Students then learn to solve systems of linear inequalities by graphing and how to write a system of linear inequalities.		
6. Exponential Functions	This unit begins with graphs of exponential functions. Students graph and transform exponential functions and interpret key features of graphs, including intercepts and end behavior. Students also learn how to determine an average rate of change for a given interval. Finally, students compare linear and exponential functions and work with multiple representations of both types of functions.	*Online or paper-based worksheets and practice sets *Quizzes *Threaded discussions	*Exams (unit, semester and final) *Essays, research papers, and other writing assignments *Presentations
7. Sequences and Modeling with Functions Unit 8. Semester Review and Test	A sequence is a function with integer domain. In this unit, students learn about sequences, with a focus on arithmetic and geometric sequences. Students model real-world situations with linear and exponential equations, using function or sequence notation as needed.	*Online or paper-based worksheets and practice sets *Quizzes *Threaded discussions	*Exams (unit, semester and final) *Essays, research papers, and other writing assignments *Presentations *Semester Test, Part 1 *Semester Test, Part 2
Semester 2			
1. Univariate Data	This unit covers graphs and statistics used with univariate data. Students create and interpret dot plots, histograms, and box-and-whisker plots and calculate measures of center and spread.	*Online or paper-based worksheets and practice sets *Quizzes *Threaded discussions	*Exams (unit, semester and final) *Essays, research papers, and other writing assignments *Presentations

	Students also learn how to choose the most appropriate measures for a situation and how to identify outliers.		
2. Bivariate Data	Sometimes, data comes in ordered pairs. When these ordered pairs are graphed, patterns may emerge. In this unit, students graph two-dimensional data and describe how the input values (the x-values) are related to the output values (the y-values). Students use correlation and linear regression to describe the relationship between the values.	*Online or paper-based worksheets and practice sets *Quizzes *Threaded discussions	*Exams (unit, semester and final) *Essays, research papers, and other writing assignments *Presentations
3. Basic Tools and Transformations	This unit reviews essential geometric terms and concepts, including the segment and angle addition postulates, before moving onto transformations. Students will learn how to use mapping rules for transformations on the coordinate plane. Students will also learn about polygons and symmetry.	*Online or paper-based worksheets and practice sets *Quizzes *Threaded discussions	*Exams (unit, semester and final) *Essays, research papers, and other writing assignments *Presentations
4. Proof, Congruence, and Construction	In this unit, students learn about reasoning and proof before performing geometric constructions, including segment and angle bisectors and simple regular polygons.	*Online or paper-based worksheets and practice sets *Quizzes *Threaded discussions	*Exams (unit, semester and final) *Essays, research papers, and other writing assignments *Presentations

	Students also learn about triangle congruence and proving triangle congruence with either congruence postulates and theorems or through a series of rigid motions.		
5. Analytic Geometry	When the tools of algebra are applied to geometry, the result is called analytic geometry. In this unit, students learn how to use coordinates and algebra to solve geometric problems, prove theorems, and describe geometric relationships.	*Online or paper-based worksheets and practice sets *Quizzes *Threaded discussions	*Exams (unit, semester and final) *Essays, research papers, and other writing assignments *Presentations
6. Project: Sports Statistics	In this unit, students will analyze data about professional players in a sport of their choosing. Students will complete tables with data from their research, create a presentation, and complete a reflection task.	*Online or paper-based worksheets and practice sets *Quizzes *Threaded discussions	*Exams (unit, semester and final) *Essays, research papers, and other writing assignments *Presentations
7. Semester Review 8. Semester Test	Students will review semester content.	*Online or paper-based worksheets and practice sets	*Semester Test, Part 1 *Semester Test, Part 2

ESSENTIAL STANDARDS:

https://docs.google.com/spreadsheets/d/1U1RwyxRlY_UYjclsCF5sI9dtBCxtq8UI/edit?usp=sharing&ouid=104956413096596664509&rtopf=true&sd=true

RELEVANT STANDARDS AND FRAMEWORKS, CONTENT/PROGRAM SPECIFIC STANDARDS:

Link to Common Core Standards (if applicable):

Educational standards describe what students should know and be able to do in each subject in each grade. In California, the State Board of Education decides on the standards for all students, from kindergarten through high school.

https://docs.google.com/spreadsheets/d/1U1RwyxRlY_UYjclsCF5sI9dtBCxtq8UI/edit?usp=sharing&oid=104956413096596664509&rtpof=true&sd=true

Link to Framework (if applicable):

Curriculum frameworks provide guidance for implementing the content standards adopted by the State Board of Education (SBE). Frameworks are developed by the Instructional Quality Commission, formerly known as the Curriculum Development and Supplemental Materials Commission, which also reviews and recommends textbooks and other instructional materials to be adopted by the SBE.

<https://www.cde.ca.gov/ci/ma/cf/>

Link to Subject Area Content Standards (if applicable):

Content standards were designed to encourage the highest achievement of every student, by defining the knowledge, concepts, and skills that students should acquire at each grade level.

<https://www.cde.ca.gov/be/st/ss/documents/ccssmathstandardaug2013.pdf>

Link to Program Content Area Standards (if applicable):

Program Content Area Standards apply to programs such as International Baccalaureate, Advanced Placement, Career and Technical Education, etc.

N/A

TEXTBOOKS AND RESOURCE MATERIALS:

Textbooks

Board Approved	Pilot Completion Date (If applicable)	Textbook Title	Author(s)	Publisher	Edition	Date
Yes		<i>Online Curriculum</i>	K12 Stride	K12 Stride		12/1/2021
Yes		<i>Algebra 1 Reference Guide and Problem Sets</i>	Susan Raley, Paul Thomas, Kelly Engel	K12 Stride		12/1/2021

Other Resource Materials

N/A

Supplemental Materials

Board approved supplemental materials (Including but not limited to: Film Clips, Digital Resources, Supplemental texts, DVDs, Programs (Pebble Creek, DBQ, etc.):

N/A