Math for Modern Living
Program of Studies Description

This course is designed for the career-bound student seeking a fourth math credit. By beginning with basic algebra skills and moving through a currently relevant curriculum, this course explores the various mathematical concepts needed to be successful in today's work environment. Topics include data analysis for modern living, being a smart statistician, understanding financial mathematics, using discrete math in real life situations, and applying geometric properties to solve problems.

June, 2026

Math For Modern Living
Syllabus

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REQUIRED TOPICS OF STUDY	SUGGESTED INSTRUCTIONAL TIME	STANDARDS/ ELIGIBLE CONTENT	COMMON ASSESSMENT
Unit 1: Exploring Careers through Math Data Collection	20 - 24 days	CC.2.1.HS.F.2 , CC.2.1.HS.F.4, CC.2.1.HS.F.5, CC.2.1.HS.F.6, CC.2.2.HS.D.1, CC.2.2.HS.D.7 CC.2.1.HS.F.3 , CC.2.4.HS.B.2, CC.2.4.HS.B.3, CC.2.4.HS.B.5	
Unit 2: Algebraic Skill Review	54-60 days	CC.2.2.HS.D.2, CC.2.2.HS.D.6 ,CC.2.2.HS.D.8, CC.2.2.HS.D.9, CC.2.2.HS.D.10	**Assessment range broken into smaller pieces/topics (10-12 classes per topic)** **1) Solving equations** **2) Inequalities** **3) Absolute Value** **4) Graphing Linear Equations** **5) Solving Systems of Equations**
Unit 3: Mathematical Financial Literacy	60 - 66 days	CC.2.2.HS.C.1, CC.2.2.HS.C.2, CC.2.2.HS.C.3, CC.2.2.HS.C.5 , CC.2.2.HS.C.6	

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Unit 4: Discrete Mathematics	20 - 24 days	CC.2.4.HS.B.1, CC.2.4.HS.B.2, CC.2.4.HS.B.4, CC.2.4.HS.B.6, CC.2.4.HS.B.7,	

Resources:

Primary Textbook/Resource: Algebra 2 Common Core Edition (Glencoe, 2014), Discovering Geometry(Key Curriculum Press 2008)

IXL, DeltaMath, Khan Academy, Desmos, Kuta Software

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Curriculum Map

Unit 1	**Unit 1 - Career Exploration/Data Analysis**
Big Idea	**Explore Careers with a focus on necessary math skills/knowledge**
Unit Essential Questions:	**What skills/materials do we need to advance from high school math to a job/future career?**
Total Number of Classes for Unit	**10-12 Classes**

Date/weeks	PA Standards/ Eligible Content	Vocabulary	Instructional Materials	Common Assessments	Link to Profile of a Zephyr
	CC.2.1.HS.F.2 , CC.2.1.HS.F.4, CC.2.1.HS.F.5, CC.2.1.HS.F.6, CC.2.2.HS.D.1, CC.2.2.HS.D.7	Aptitude, Resume, Value, Salary, cost of goods and services	Career Investigation Interest Survey	Lottery Winnings Career Investigative Project	Responsible, Communicative, Creative
	CC.2.1.HS.F.3 , CC.2.4.HS.B.2, CC.2.4.HS.B.3, CC.2.4.HS.B.5	collect real life data, calculate mean, mode, median, etc.;		Cost of Living Project	Responsible

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Unit 2	**Unit 2 - Algebra Skills Review**				
Big Idea	**Review Essential Algebra skills**				
Unit Essential Questions:	**Can students solve multi-step equations, compound inequalities, absolute value equations, graph linear equations and solve systems of equations in all 3(graphing, substitution, and elimination) ways?**				
Total Number of Classes for Unit	**27-30 Classes**				
Date/weeks	**PA Standards/ Eligible Content**	**Vocabulary**	**Instructional Materials**	**Common Assessments**	**Link to Profile of a Zephyr**
	CC.2.2.HS.D.2, CC.2.2.HS.D.6 ,CC.2.2.HS.D.8, CC.2.2.HS.D.9, CC.2.2.HS.D.10	Coefficient, variable, binomial, polynomial, linear, inequality, absolute value, slope, intercept, parallel, perpendicular,	IXL Delta Math Additional worksheets and activities	Inequalities Quiz Solving Equations Quiz Graphing Linear Equations Quiz 1 Graphing Linear Equations Quiz 2	

Unit 3	**Unit 3 - Financial Math**

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Big Idea	**Students will be familiar with major financial aspects in real life such as taxes, loans, interest, and banking**
Unit Essential Questions:	**What math skills will the student need to be successful financially?**
Total Number of Classes for Unit	**30-33 Classes**

Date/weeks	PA Standards/ Eligible Content	Vocabulary	Instructional Materials	Common Assessments	Link to Profile of a Zephyr
	CC.2.2.HS.C.1, CC.2.2.HS.C.2, CC.2.2.HS.C.3, CC.2.2.HS.C.5 , CC.2.2.HS.C.6	Dependants, simple interest, compound interest, deductions, exemption, loan, etc.	Mostly worksheets and premade materials Use of US tax code and regulatory forms Pay documents and example banking documents. IXL, Delta Math	Apartment Budget Project Pay Stubs vs. W2 Quiz 1040 Quiz Checking and Credit Quiz Interest Quiz	

Unit 4	**Unit 4 - Discrete Math**
Big Idea	**Probability and Logistics**
Unit Essential	**How do we make predictions and estimations? What planning is involved in preparing for specific events?**

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Questions:					
Total Number of Classes for Unit	**10-12 Classes**				
Date/weeks	**PA Standards/ Eligible Content**	**Vocabulary**	**Instructional Materials**	**Common Assessments**	**Link to Profile of a Zephyr**
	CC.2.4.HS.B.1, CC.2.4.HS.B.2, CC.2.4.HS.B.4, CC.2.4.HS.B.6, CC.2.4.HS.B.7,	Estimate, predict, chance, probability, logistics, etc.	Dice, cards, marbles, IXL, Desmos		

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