Kaneland High School
Scope and Sequence
2025-2026

This document outlines the curriculum at Kaneland High School, providing a framework for teachers to deliver consistent and effective instruction that aligns with academic standards, ultimately supporting your student's success. At Kaneland High School, we are committed to an ongoing process of curriculum review and development, and the information in this document will be updated as revisions are made. For a detailed look at the curriculum, please select a content area below to explore the courses offered within that department.

Updated Jul 30, 2025

Career & Technical Education (CTE) - Class Scope and Sequences

Agriculture, Food & Natural Resources Pathway		
Career Cluster	**KHS Course Name**	**Credit**
General Agriculture	Intro to Agriculture 1 (orientation course)	0.5
	Intro to Agriculture 2	0.5
	Supervised Agricultural Exp.	0.5
Agribusiness	Ag Finance	0.5
Plant Systems	Intro to Horticulture	1
	Advanced Horticulture 1	2
	Advanced Horticulture 2	2
	Horticulture Independent Study: Applications	2
Animal Systems	Animal Science	0.5
	Animal Health & Nutrition	0.5

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Intro to Agriculture 1			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	What is Agriculture?		• Segments of the AFNR Industry • Agricultural Commodities • Agricultural Careers
2	Leadership and Communication		• Agricultural Education Model • FFA/SAE • Types of Communication
3	Intro to Natural Resources		• Components of Soil • Soil Formation and Erosion • Soil Texture, Permeability, pH • Water Movement and Quality
4	Intro to Animal Science		• Animal Terminology • Internal and External Animal Anatomy • Animal Needs (Feed, Environment, Behavior)

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Intro to Agriculture 2			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	SAE/FFA	10-14	• Supervised Agricultural Experiences • Record Keeping • Goal Setting • Leadership development
2	Plants	40	• Plant cells and cell structures • All about plants (structures, functions, ect.) • Plant needs • Edible Agriculture
3	Agriculture Power and Technology	30	• Energy in Agriculture • Precision Agriculture • Planning and design
4	The Future of Agriscience	7-10	• Your future in the agriscience industry • New developments in Agriculture

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Supervised Agricultural Exp.			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
			This course is not running for the 2025-2026 school year. It will be offered again in 2026-2027.

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Ag Finance			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
			This course is not running for the 2025-2026 school year. It will be offered again in 2026-2027.

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Intro to Horticulture			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Introduction to Horticulture		• Careers and segments of the Plant Industry • Plants and their Uses • Taxonomic Classification/Binomial Nomenclature
2	Soil Physical and Chemical Properties		• Soil Texture and Structure • Soil Permeability and Water Holding Capacity • Soil Microorganisms and Organic Matter • Soil pH and Salinity • Plant Nutrients • Fertilizer Calculations

3	Plant Anatomy		• Roots
			  ○ Root Anatomy
			  ○ Root Systems
			• Leaves
			  ○ Leaf Anatomy
			  ○ Tree Identification
			• Stems
			  ○ Stem Anatomy
			  ○ Meristematic Tissue
			• Flowers

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			○ Flower Anatomy
4	Plant Taxonomy and Growth Requirements		• Taxonomic Classification • Temperature, Water, Light
5	Holiday Floral Design		• Using and Identifying Floral Design Tools • Making A Bow • Poinsettia Production • Wreath and Holiday Swag Production
6	Floral Design		• Boutonnieres and Corsages • Flower Types • Elements of Design • Floral Arrangements
7			
8	Plant Propagation		• Sexual Reproduction & Germination • Seed Germination Mechanisms • Propagation by ○ Layering ○ Cutting ○ Division/Separation ○ Grafting

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Advanced Horticulture 1			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Horticulture Independent Project		• Horticulture SAE OR • Horticulture Research OR • Horticulture Independent Exploratory Project
2	Greenhouse Production and IPM		• Greenhouse Management Plans • Integrated Pest Management Plans • Formulating Growing Media for specific crops • Emphasis on Workplace development
3	Hydroponics		• Common Hydroponic Systems • Common Hydroponic Media/Substrates • Common Hydroponic Crops • Fertilizer and pH management
	Advanced Landscape Design		• ILCA Landscape Design Competition • Landscape Plant Selection • Advanced Landscape Design Techniques

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4			
			• Advanced Floral Techniques • Holiday Floral Applications • Wedding and Sympathy Arrangements • Vase Arrangements
5	Advanced Floral Design		• Propagation of Succulent, Herbaceous, and Woody Plants • Propagation of Greenhouse Crops by Seed • Propagation via Tissue Culture
5	Advanced Plant Propagation		• Marketing and pricing of greenhouse crops • Development of signage and promotional materials
6	Horticultural Business		• Install and maintain landscape plants • Plan for a Vegetable Garden • Growing of Vegetable Crops
7	Landscape Maintenance and Vegetable Gardening		• Horticulture SAE OR • Horticulture Research OR • Horticulture Independent Exploratory Project

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Advanced Horticulture 2			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
			This course is not running for the 2025-2026 school year. It will be offered again in 2026-2027.

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Horticulture Independent Study: Applications			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
			This course is not running for the 2025-2026 school year. It will be offered again in 2026-2027.

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Animal Science			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	History and Use of Animals	12	• Animal Uses • Animals in History • Animal Domestication
2	Animal Welfare and Behavior	11	• Animal Welfare vs. Animal Rights • Common Animal Issues and Misconceptions • Animal Welfare and Media • Positive and Negative Response • Instinctive vs. Learned Behavior • Animal Handling Techniques and Equipment
3	Animal Needs and Facilities	15	• Space Requirements • Feed and Water Needs • Temperature Needs • Sanitation and Biosecurity • Using scale for model drawings • Create a scale model of an animal facility
4	Cells, Tissues, and Systems	15	• Animal Tissues • Body Systems • Respiratory and Circulatory Systems • Fetal Pig Dissection
5	Animal Reproduction	20	• Female and Male Anatomy & Dissection • Hormones and Estrus Cycle • Animal Breeding Practices - AI vs. Conventional • Animal Genetics and Selection

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Animal Health & Nutrition			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Safety and Sanitation		• Demonstrate Proper Handwashing • Identify Safety Hazards and necessary PPE • Practice Surgical Gowning and Gloving • Biosecurity: Zoonotic Diseases
2	Tools of the Trade		• Identify common veterinary tools • Analyze tools for cleanliness • Practice preparing a surgical pack • Identify common latin terms used in vet science • Identify common veterinary abbreviations
3	Clear Communication		• Identify common symptoms for each body system. • Communicate using anatomical and directional terms. • Communicate with clients verbally and non-verbally
4	Physical Exams and Prevention		• Conduct a physical exam • Identify and perform 5 animal restraints • Preventative Nail Care • Preventative Dental Care • Preventative Medication
5	Long term care		• Compile patient records • Identify common genetic disorders • Identify parasite samples • Create a preventative maintenance plan
6	Communication is Key		• Simulate RFID microchipping • Compile a patient history • Collect urine and fecal samples
7	Medication		• Classify animal pharmaceuticals • Identify important parts of the medicine label • Calculate proper dosages • Fill prescriptions • Administer ophthalmic, oral, and aural medication
8	Vaccines and Wounds		• Practice the correct procedure for selecting a needle and filling a syringe • Simulate administering injections • Perform proper wound care (cleaning, bandaging, bandage removal)

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			• Practice suturing and removing sutures • Develop a vaccination schedule

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Career & Technical Education (CTE) - Class Scope and Sequences

Arts & Communication (A & C) Pathway		
Career Cluster	**KHS Course Name**	**Credit**
Graphic Communications	Graphic Communications 1 (orientation course)	0.5
	Graphic Communications 2 (orientation course)	0.5
	Graphic Communications 3	0.5
	Adv. Graph Comm: Production & Portfolio	2
	Adv. Graph Comm: Production & Branding	2

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Graphic Communications 1			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Vector Illustration	35	• 1-1: Pen Tool Vector Image Creation • 1-2: Anchor point control • 1-3: Vector artwork appearance and finishes • 1-4: Tool Technique
2	Image Manipulation	20	• 2-1: Resolution • 2-2: Image selection and refinement • 2-3: Gradients and filters • 2-4: Layer panel
3	Page Layout and	10	• 3-1: Components of design

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	Composition		• 3-2: Elements of design in a page layout • 3-3: Principles of design • 3-4: Type in page layout • 3-5: Creative Process
4	Typography	5	• 4-1: Font Families • 4-2: Screen/Printer fonts and installation • 4-3: Font Hierarchy
5	Production	2	• 5-1: Technical Application • 5-2: Finishing • 5-3: Digital Printing
6	Pre-press	2	• 6-1: File setup • 6-2: File format • 6-3: File organization • 6-4: Creative Commons and Copyright • 6-5: Design for pre-press
7	Essential Skills	2	• 7-1: Student Responsibility

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Graphic Communications 2			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Artwork Creation and Manipulation or Skills	15	• 1-1: Ps tools and menus • 1-2: Ps Layers and Masks • 1-3: Ps Create and Manipulate • 1-4: AI tools and menus • 1-5: AI drawing tools • 1-6: AI type, layers, shapes, and symbols • 1-7: ID tools and menus • 1-8: ID document setup and pages • 1-9: ID objects, text, color, styles • 1-10: Ae tools and menus • 1-11: Ae motion graphic creation
2	Page Layout and Design or Visual Design/Aesthetics or Originality/Creativity	15	• 2-1: Components of Design • 2-2: Elements of Design • 2-3: Principles of Design • 2-4: Creative Process • 2-5: Type Hierarchy • 2-6: Color Theory
3	Print and Media Production (Graphic techniques and	40	• 3-1: Paper and Ink for Print • 3-2: Printing Processes for Print • 3-3: CMYK and PMS colors

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	processes)		• 3-4: Digital and Position Proofs • 3-5: Color approval and press checks • 3-6: Technical Application • 3-7: Finishing • 3-8: Production Process Completion
4	Technology Use and File Management or Accuracy and Organization	7	• 4-1: Printable file creation • 4-2: Resolution • 4-3: Font Installation • 4-4: Workflow • 4-5: File Setup • 4-6: File Organization • 4-7: Creative Commons and Copyright
5	Essential Employability (Student Responsibility) or Project Basics/Research & Definition of Project or Critique/Participation	5	• 5-1: Teamwork and Conflict Resolution • 5-2: Communication • 5-3: Problem Solving • 5-4: Decision Making • 5-5: Critical Thinking • 5-6: Adaptability and Flexibility • 5-7: Initiative and Self-Drive • 5-8: Reliability and Accountability • 5-9: Cultural Competence • 5-10: Planning and Organizing • 5-11: Student Responsibility

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Graphic Communications 3			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Artwork Creation and Manipulation or Skills	15	• 1-1: Ps tools and menus • 1-2: Ps Layers and Masks • 1-3: Ps Create and Manipulate • 1-4: AI tools and menus • 1-5: AI drawing tools • 1-6: AI type, layers, shapes, and symbols • 1-7: ID tools and menus • 1-8: ID document setup and pages • 1-9: ID objects, text, color, styles • 1-10: Ae tools and menus • 1-11: Ae motion graphic creation
2	Page Layout and Design or Visual Design/Aesthetics or Originality/Creativity	15	• 2-1: Components of Design • 2-2: Elements of Design • 2-3: Principles of Design • 2-4: Creative Process • 2-5: Type Hierarchy

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			• 2-6: Color Theory
3	Print and Media Production (Graphic techniques and processes)	40	• 3-1: Paper and Ink for Print • 3-2: Printing Processes for Print • 3-3: CMYK and PMS colors • 3-4: Digital and Position Proofs • 3-5: Color approval and press checks • 3-6: Technical Application • 3-7: Finishing • 3-8: Production Process Completion
4	Technology Use and File Management or Accuracy and Organization	7	• 4-1: Printable file creation • 4-2: Resolution • 4-3: Font Installation • 4-4: Workflow • 4-5: File Setup • 4-6: File Organization • 4-7: Creative Commons and Copyright
5	Essential Employability (Student Responsibility) or Project Basics/Research & Definition of Project or Critique/Participation	5	• 5-1: Teamwork and Conflict Resolution • 5-2: Communication • 5-3: Problem Solving • 5-4: Decision Making • 5-5: Critical Thinking • 5-6: Adaptability and Flexibility • 5-7: Initiative and Self-Drive • 5-8: Reliability and Accountability • 5-9: Cultural Competence • 5-10: Planning and Organizing • 5-11: Student Responsibility

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Adv. Graph Comm: Production & Portfolio

Unit #	Unit Title	Estimated days	Topics Covered:
1	Artwork Creation and Manipulation or Skills	30	• 1-1: Ps tools and menus • 1-2: Ps Layers and Masks • 1-3: Ps Create and Manipulate • 1-4: AI tools and menus • 1-5: AI drawing tools • 1-6: AI type, layers, shapes, and symbols • 1-7: ID tools and menus • 1-8: ID document setup and pages • 1-9: ID objects, text, color, styles • 1-10: Ae tools and menus • 1-11: Ae motion graphic creation
2	Page Layout and	30	• 2-1: Components of Design

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	Design or Visual Design/Aesthetics or Originality/Creativity		• 2-2: Elements of Design • 2-3: Principles of Design • 2-4: Creative Process • 2-5: Type Hierarchy • 2-6: Color Theory
3	Print and Media Production (Graphic techniques and processes)	80	• 3-1: Paper and Ink for Print • 3-2: Printing Processes for Print • 3-3: CMYK and PMS colors • 3-4: Digital and Position Proofs • 3-5: Color approval and press checks • 3-6: Technical Application • 3-7: Finishing • 3-8: Production Process Completion
4	Technology Use and File Management or Accuracy and Organization	14	• 4-1: Printable file creation • 4-2: Resolution • 4-3: Font Installation • 4-4: Workflow • 4-5: File Setup • 4-6: File Organization • 4-7: Creative Commons and Copyright
5	Essential Employability (Student Responsibility) or Project Basics/Research & Definition of Project or Critique/Participation	1	• 5-1: Teamwork and Conflict Resolution • 5-2: Communication • 5-3: Problem Solving • 5-4: Decision Making • 5-5: Critical Thinking • 5-6: Adaptability and Flexibility • 5-7: Initiative and Self-Drive • 5-8: Reliability and Accountability • 5-9: Cultural Competence • 5-10: Planning and Organizing • 5-11: Student Responsibility

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Adv. Graph Comm: Production and Branding

Unit #	Unit Title	Estimated days	Topics Covered:
1	Artwork Creation and Manipulation or Skills	30	• 1-1: Ps tools and menus • 1-2: Ps Layers and Masks • 1-3: Ps Create and Manipulate • 1-4: AI tools and menus • 1-5: AI drawing tools • 1-6: AI type, layers, shapes, and symbols • 1-7: ID tools and menus • 1-8: ID document setup and pages

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			• 1-9: ID objects, text, color, styles • 1-10: Ae tools and menus • 1-11: Ae motion graphic creation
2	Page Layout and Design or Visual Design/Aesthetics or Originality/Creativity	30	• 2-1: Components of Design • 2-2: Elements of Design • 2-3: Principles of Design • 2-4: Creative Process • 2-5: Type Hierarchy • 2-6: Color Theory
3	Print and Media Production (Graphic techniques and processes)	80	• 3-1: Paper and Ink for Print • 3-2: Printing Processes for Print • 3-3: CMYK and PMS colors • 3-4: Digital and Position Proofs • 3-5: Color approval and press checks • 3-6: Technical Application • 3-7: Finishing • 3-8: Production Process Completion
4	Technology Use and File Management or Accuracy and Organization	14	• 4-1: Printable file creation • 4-2: Resolution • 4-3: Font Installation • 4-4: Workflow • 4-5: File Setup • 4-6: File Organization • 4-7: Creative Commons and Copyright
5	Essential Employability (Student Responsibility) or Project Basics/Research & Definition of Project or Critique/Participation	10	• 5-1: Teamwork and Conflict Resolution • 5-2: Communication • 5-3: Problem Solving • 5-4: Decision Making • 5-5: Critical Thinking • 5-6: Adaptability and Flexibility • 5-7: Initiative and Self-Drive • 5-8: Reliability and Accountability • 5-9: Cultural Competence • 5-10: Planning and Organizing • 5-11: Student Responsibility

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Career & Technical Education (CTE) - Class Scope and Sequences

Finance and Business Services		
Career Cluster	**KHS Course Name**	**Credit**
Business Management & Administration	Intro to Business Computing (orientation course)	0.5
	Business 1 (orientation course)	0.5
	Business 2	0.5
	Entrepreneurship	0.5
	Virtual Enterprise (VE) 2	1
Marketing	Sports & Entertainment Marketing	0.5
Finance	Accounting 1	0.5
	Accounting 2	0.5
	College Accounting	1
	Personal Finance (Graduation requirement on its own - not a CTE course)	0.5
	AP Microeconomics (current not in a pathway but offered here at KHS)	1

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Intro to Business Computing			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Digital Citizenship	5	•
2	Presentation Skills	25	•
3	Spreadsheets	25	•
4	Documents	25	•

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Business 1			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Business & Economic Basics	32	• Wants & Needs, Business Activities, Economic Resources, Economic Systems, US Economic History, The Business Cycle, Characteristics of Successful Business Person, Market Structure & Competition, Supply & Demand
2	Accounting & Break Even Analysis	11	• Basic Accounting Concepts, Break-even Analysis
3	Owning & Operating a Business	18	• Rewards & Challenges of Entrepreneurship, The Business Plan, Types of Pay Structures, Types of Business Ownership, Types and Functions of Business, Business Valuation, Management Functions, Management Structures, Leadership Qualities, Leadership Styles
4	Marketing & Sales	31	• Marketing Essentials, Market Research and Product Development, Target Marketing & 4 Ps of Marketing (Product, Place, Price, & Promotion), Product Life Cycle & The Boston Matrix, Sales Basics, Steps of the Sale Process

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Business 2			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Business & Economics Review	13	• Review of Business & Economic Basics
2	Influences on Business & Business Law	31	• The Global Marketplace, Global Competition, Government as a Regulator, Government as a Provider, Money and Banking, Types of Financial Institutions, Income Tax, Business Law including Contracts, Product Liability, Business Ownership Structures,
3	Credit	13	• Credit Essentials, Types of Credit, Applying for Credit, Maintaining Credit, Credit Laws, Solving Credit Problems
4	Risk Management	11	• Types of Risk, Handling Risk, Vehicle Insurance, Property Insurance, Life Insurance, Health Insurance, Business Insurance
5	Money Management	24	• Steps of Financial Planning Process, Money Management, Basics of Checking Accounts, Account Records, Basics of Savings Accounts, Bonds, Stocks, Real Estate, Other Investments, Financial Management, Accounting
6	Financial Analysis & Business Investment Opportunity	TBD	• Extension Unit (Time Permitting) Time Value of Money, Analysis of Financial Ratios

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Entrepreneurship			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Leadership	16-18	• Compare & Contrast the different leadership styles • Apply the leadership styles in appropriate situations • Determine the individual leadership style

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2	Entrepreneurship	20-22	• Compare and Contrast Invention vs. Innovation • Identify characteristics and skills needed to become a successful entrepreneur • Compare/Contrast the different types of ownership • Explore different types of entrepreneurial opportunities or routes • Research successful entrepreneur • Business Plan; Using knowledge learned in units, develop components of a business plan for a business
3	Management Functions	20-22	• Discuss the importance of vision, mission, goals, and objectives setting within the context of the business environment. • Describe the role of strategic planning process. • Describe how the organization provides accountability by delegating authority and assigning responsibilities. • Evaluate how businesses are organized to achieve desired goals. • Analyze the management skills necessary for leading/directing at various management levels. • Determine the evaluating/controlling strategy for a given business situation. • Compare and contrast the functions to one another.
4	Ethics and Social Responsibility	15-18	• Identify ways companies are socially responsible. • Identify types of workplace deviances. • Using the steps to ethical decision making, apply appropriate measures based upon the type of workplace deviance.

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Virtual Enterprise (VE) 2			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
			This course is not running for the 2025-2026 school year. It will be offered again in 2026-2027.

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Sports & Entertainment Marketing			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Sports & Entertainment Marketing & Putting the Customer First	16-20	• Marketing Basics, Marketing Concepts, Financial Analysis & Risk Management, Ethics in Business,
2	The Wide World of Sports Marketing & Information Management	16-18	• Global Trends, Diversity in the Industry, Marketing Information Systems
3	The Product, Managing the Channels, Promotion, & Promotional Planning	16-20	• Product Mix, Channels of Distribution, Pricing Strategies, Promotion & Advertising, Promotional Planning,
4	Selling, The Marketing Game Plan, Legal Issues, & Scoring a Career	16-18	• Selling, Mapping Strategies, and Legal Issues.

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Accounting 1			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Analyzing transactions for a proprietorship service	20-26	• The Accounting Equation • Analyzing Transactions • Debit and Credit

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	business,		
2	Analyzing, journalizing, and posting transactions for a service business.	20-26	• Recording a transaction into a general journal • Posting a transaction into a general ledger • Preparing a Trial Balance • Checking account, reconciliation, and petty cash
3	Completing Accounting Cycle for Service Business	20-26	• Preparing an accountant's Work Sheet • Adjusting Entries • Recording Adjusting and Closing Entries • Prepare an Income Statement, a Statement of Owner's Equity, and a Balance Sheet. • Post-Closing Trial Balance
4	The Accounting Cycle	10	• Project - Completing the Accounting Cycle

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Accounting 2			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Analyze, Journalize, and Posting Transactions for a Service Business using Special Journals	20	• Journalize a transaction using the special journals approach. • Post from the special journal to the general ledger.
2	Accounting for Uncollectible Accounts	25	• Uncollectible Accounts Receivable • Writing Off and Collecting Uncollectible Accounts Receivable
3	Preparing Adjusting and Closing Entries, and Financial Statements	25	• Preparing an accountant's Work Sheet • Adjusting Entries • Recording Adjusting and Closing Entries • Prepare an Income Statement, a Statement of Stockholder's Equity, and a Balance Sheet. • Post-Closing Trial Balance
4	Financial Statement Analysis	10	• Vertical and horizontal analysis of an Income Statement and Balance Sheet. • Analyzing financial statements using financial rations

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College Accounting			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
			Please refer to the class syllabus for the curriculum outline for this course.

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Personal Finance			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Economic Systems & Consumer Decision	10	1. Analyze economic relationships that exist between households and businesses in the market economy. 2. Define values, goals, needs, and wants. 3. Define economic terms and explain the relationships of scarcity, choice, opportunity cost and resource allocation. Determine opportunity costs associated with financial decisions. 4. Describe how supply and demand are affected by price and outside forces. 5. Describe the 4 Economic Systems and how scarcity affects how the 3 basic questions are answered. 6. Recognize the characteristics of different economic systems and assess the impact on consumer choices. 7. Describe the impact of fiscal and monetary policy on individuals, families, and the community.
2	Banking	10	1. Describe the role of the Federal Reserve in the banking system and the economy. 2. Recognize the important role the FDIC plays in the financial industry, economic stability and the benefit to consumers. 3. Identify the types of accounts and the amount of money insured by the FDIC. 4. Recognize the important role banks play in the community and the economy. 5. Describe 5 services offered by banks and how they affect your decision to choose a bank. 6. Explain 4 common fees banks charge. 7. Identify the positives and negatives in opting-in

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			of debit card overdraft protection when opening a checking account. 8. Identify at least three reasons for using the services of a financial institution, including security, interest, and the ability to track spending. 9. Identify and describe the purpose of the following endorsements: blank, restrictive and special endorsements. 10. Differentiate between banks and credit unions. 11. List the steps and requirements to open a checking account. 12. Identify the following information on a check: date, check number, pay to the order line, amount of check (numbers), amount of check (written), signature, routing number, account number and memo line. 13. Prepare a deposit ticket by differentiating between currency, checks, subtotal, less cash received and net deposit. 14. Properly record transactions in a register and complete required calculations for maintaining an accurate account balance. 15. Balance a checkbook using a check register, bank statement and bank reconciliation form.
3	Credit	10	1. Define credit. 2. Identify and explain the advantages and disadvantages of using credit. 3. Distinguish between secured and unsecured credit. 4. Define annual percentage rate. 5. Define Grace period. 6. Differentiate between simple and compound interest and explain how compound interest is a disadvantage to consumers when borrowing. 7. Define credit score. 8. Identify the “C’s of credit” and define each component. 9. Describe the purpose of Truth-in-Lending Act, Fair Credit Reporting Act, Fair Credit Billing Act and Equal Credit Opportunity Act. 10. Differentiate between subsidized and unsubsidized student loans. 11. Identify the risks associated with alternative loan sources, including but not limited to: payday loans, title loans, online lending companies. 12. Describe the disadvantages and advantages of bankruptcy. 13. Create a plan to limit the risk and impact of

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			identity-theft and fraud.
4	Budgeting	10	1. Identify each step in the decision-making process when creating an income/zero based budget. 2. Differentiate between the four main components of a budget. 3. Assemble the budget by completing the calculations necessary to identify monthly disposable income. 4. Categorize and adjust monthly fixed and variable expenses to end with a Zero-Based budget. 5. Analyze how financial decisions, such as spending vs. saving, have an impact on future finances. 6. Analyze and compare options for post-secondary education and the impact of student loans.
5	Insurance	5	1. Identify the 4 main categories of insurance. 2. List economic risks including personal risks, property risk, and liability risk. 3. Identify the following insurance terms: premium, insurer, policy, policy holder. 4. Compare and contrast the different types of insurance. 5. Describe the various categories of automobile insurance. 6. List the factors that affect the cost of automobile insurance and how to lower insurance premiums. 7. Explain the reasons for purchasing homeowners/renters insurance: including the requirements of a mortgage company or landlord. 8. Explain the reasons people buy life insurance. 9. Differentiate between whole life and term insurance. 10. Identify the differences between individual and group health insurance.
6	House Buying	10	1. Compare the advantages and disadvantages of buying vs. renting an apartment or home. 2. Interpret the important information on a rental lease contract including price, rent due date, security deposit, and restrictions. 3. Identify at least three major costs to consider when buying a home. 4. Differentiate between several types of mortgages offered to a consumer. 5. Compare and contrast between a fixed or adjustable rate mortgage, and avoiding the

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			pitfalls of subprime loans and predatory lending.
7	Saving & Investing	10	1. Know the difference between saving and investing. 2. Explain the importance of liquidity and emergency saving. 3. Explain the value of long term investing and compound interest. 4. Compare and contrast the following forms of investments: bonds, stocks, and mutual funds. 5. Describe different methods of retirement planning, including pensions, 401K, 403B, Traditional IRA, Roth IRA and Social Security.

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AP Microeconomics			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	**Unit 1: Basic Economic Concepts**	20-24	**Mod 1: The Study of Economics** • How scarcity and choice are central to the study of economics • How property rights and incentives cause market economies to differ from command economies • The importance of opportunity cost and marginal analysis in individual choice and decision making • The difference between positive economics and normative economics • When economists agree and why they sometimes disagree • What makes macroeconomics different from microeconomics **Mod 3: The Production Possibilities Curve** • That sometimes a very simple model can be a powerful way of explaining important economic concepts • How the production possibilities model helps economists think about the trade-offs every economy faces • How the production possibilities model helps us understand three important aspects of the real

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			economy: efficiency, opportunity cost, and economic growth **Mod 4: Comparative Advantage and Trade** • How trade leads to gains for an individual and for national economies • The important distinction between absolute advantage and comparative advantage • How comparative advantage leads to gains from trade in the global marketplace **Mod 51: Utility Maximization** • How consumers make choices about the purchase of goods and services • Why a consumer's goal is to maximize utility • Why the principle of diminishing marginal utility applies to the consumption of most goods and services • How to use marginal analysis to find the optimal consumption bundle • Complete Personal Progress Check MCQ for Unit 1 • Complete Personal Progress Check FRQ for Unit 1 • Take Unit 1 Test.
2	**Unit 2: Supply and Demand**	26-30	**Mod 5: Supply and Demand—Introduction and Demand** • What a competitive market is and how it is described by the supply and demand model • What the demand curve is • The difference between movements along a demand curve and changes in demand • The factors that shift demand curves **Mod 6: Supply and Demand—Supply** • What the supply curve is • The difference between movements along a supply curve and changes in supply • The factors that shift supply curves • How supply and demand curves determine a market's equilibrium price and equilibrium quantity • In the case of a shortage or surplus, how price moves the market back to equilibrium

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			Mod 7: Supply and Demand—Equilibrium • How equilibrium price and quantity are affected when there is a change in either supply or demand • How equilibrium price and quantity are affected when there is a simultaneous change in both supply and demand **Mod 8: Supply and Demand—Price Controls (Ceilings and Floors)** • The meaning of price controls, one-way governments intervene in markets • How price controls can create problems and make a market inefficient • Why economists are often deeply skeptical of attempts to intervene in markets • Who benefits and who loses from price controls, and why they are used despite their well-known problems **Mod 9: Supply and Demand—Quantity Controls** • The meaning of quantity controls, another way government intervenes in markets • How quantity controls create problems and can make a market inefficient • Who benefits and who loses from quantity controls, and why they are used despite their well-known problems **Mod 46: Income and Substitution Effects, and Elasticity** • How the income and substitution effects explain the law of demand • The definition of elasticity, a measure of responsiveness to changes in prices or incomes • The importance of the price elasticity of demand, which measures the responsiveness of the quantity demanded to changes in price • How to calculate the price elasticity of demand **Mod 47: Interpreting Price Elasticity of Demand** • The difference between elastic and inelastic demand

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			• The relationship between elasticity and total revenue • Changes in the price elasticity of demand along a demand curve • The factors that determine price elasticity of demand **Mod 48: Other Important Elasticities** • How the cross-price elasticity of demand measures the responsiveness of demand for one good to changes in the price of another good • The meaning and importance of the income elasticity of demand, a measure of the responsiveness of demand to changes in income • The significance of the price elasticity of supply, which measures the responsiveness of the quantity supplied to changes in price • The factors that influence the size of these various elasticities **Mod 49: Consumer and Producer Surplus** • The meaning of consumer surplus and its relationship to the demand curve • The meaning of producer surplus and its relationship to the supply curve **Mod 50: Efficiency and Deadweight Loss** • The meaning and importance of total surplus and how it can be used to illustrate allocative efficiency in markets • How taxes affect total surplus and can create deadweight loss • How the division of the tax, or incidence, depends upon the relative price elasticities of demand and supply **Mod 44: Barriers to Trade** • The effects of trade and trade interventions • The meaning of tariffs and quotas • How to illustrate trade and trade interventions using supply and demand graphs Complete

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3	**Unit 3: Behind the Supply Curve—Profit, Production, and Costs**	24-28	**Mod 52: Defining Profit** • The difference between explicit and implicit costs and their importance in decision making • The different types of profit, including economic profit, accounting profit, and normal profit • How to calculate profit **Mod 53: Profit Maximization** • The principle of marginal analysis • How to determine the profit-maximizing level of output using the optimal output rule **Mod 54: The Production Function** • The importance of the firm's production function, the relationship between the quantity of inputs and the quantity of output • Why production is often subject to diminishing returns to inputs **Mod 55: Firm Costs** • The various types of cost a firm faces, including fixed cost, variable cost, and total cost • How a firm's costs generate marginal cost curves and average cost curves **Mod 56: Long-Run Costs and Economies of Scale** • Why a firm's costs differ in the short run versus the long run • How a firm can enjoy economies of scale **Mod 57: Introduction to Market Structure** • The meaning and dimensions of market structure • The four principal types of market structure, and key characteristics of them: perfect competition, **monopoly, oligopoly, and monopolistic competition** **Mod 58: Intro to Perfect Competition** • How a price-taking firm determines its profit-maximizing quantity of output • How to assess whether or not a competitive firm is profitable **Mod 59: Graphing Perfect Competition** • How to evaluate a perfectly competitive firm's situation using a graph

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			• How to determine a perfect competitor's profit or loss • How a firm decides whether to produce or shut down in the short run **Mod 60: Long-Run Outcomes in Perfect Competition** • Why industry behavior differs between the short run and the long run • What determines the industry supply curve in both the short run and the long run
4	**Unit 4: Imperfect Competition**	24-26	**Mod 61: Intro to Monopoly** • How a monopolist determines the profit-maximizing price • How to determine whether a monopoly is earning a profit or a loss • How the monopoly outcome is different from the long-run outcome in perfect competition **Mod 62: Monopoly and Public Policy** • The effects of monopoly on society's welfare • How policymakers address the problems posed by monopoly **Mod 63: Price Discrimination** • The meaning of price discrimination • Why common examples of price discrimination are so prevalent when producers have market power **Mod 64: Intro to Oligopoly** • Why oligopolists have an incentive to act in ways that reduce their combined profit • Why oligopolies can benefit from collusion **Mod 65: Game Theory** • How oligopoly can be analyzed using game theory • The concept of the prisoners' dilemma • How repeated interactions among oligopolists can result in collusion in the absence of any formal agreement **Mod 66: Oligopoly in Practice**

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			• The legal background of antitrust policy • The factors that limit tacit collusion • The causes and effects of price wars, product differentiation, price leadership, and non-price competition • The importance of oligopoly in the real world **Mod 67: Intro to Monopolistic Competitio**n • How prices and profits are determined in monopolistic competition, both in the short run and in the long run • How monopolistic competition can lead to inefficiency and excess capacity **Mod 68: Product Differentiation and Advertising** • How and why oligopolists and monopolistic competitors differentiate their products • The economic significance of advertising and brand names
5	**Unit 5: Factor Markets**	22-26	**Mod 69: Introduction and Factor Demand** • How factors of production are traded in factor markets • How factor markets determine the factor distribution of income • How the demand for a factor of production is determined **Mod 70: Markets for Land and Capital** • How to determine demand and supply in the markets for land and capital • How to find equilibrium in the capital and land markets • How the demand for factors leads to the marginal productivity theory of income distribution **Mod 71: Market for Labor** • The way in which a worker's decision about time preference gives rise to labor supply • How to find equilibrium in the perfectly competitive labor market • How equilibrium in the labor market is determined if either the product or the factor market is not perfectly competitive **Mod 72: Cost-Minimizing Input Combination**

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			• How firms determine the optimal input mix • The cost-minimizing rule for hiring inputs
6	**Unit 6: Market Failure and the Role of Government**	22-26	**Mod 74: Introduction and Externalities** • What externalities are and why they can lead to inefficiency in a market economy • Why externalities often require government intervention • The difference between negative consumption externalities, positive consumption externalities, negative production externalities, and positive production externalities **Mod 75: Externalities and Public Policy** • How external benefits and costs cause inefficiency in markets • Why some government policies to deal with externalities—such as emissions taxes, tradable emissions permits, and Pigouvian subsidies—are efficient, although others, including environmental standards, are not **Mod 76: Public Goods** • How public goods are characterized and why markets fail to supply efficient quantities of public goods • What common resources are and why they are overused • What artificially scarce goods are and why they are under-consumed • How government intervention in the production and consumption of these types of goods can make society better off • Why finding the right level of government intervention is often difficult **Mod 77: Public Policy to Promote Competition** • The three major antitrust laws and how they are designed to promote competition • How government regulation is used to prevent inefficiency in the case of natural monopoly • The pros and cons of using marginal cost pricing and average cost pricing to regulate prices in natural monopolies **Mod 78: Income Inequality and Income Distribution** • What defines poverty, what causes poverty, and the consequences of poverty • How income inequality is measured, and how it has changed over time in America; how

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			programs like Social Security affect poverty and income inequality **Mod 73: Theories of Income Distribution** ● Labor market applications of the marginal productivity theory of income distribution ● Sources of wage disparities, including the role of discrimination

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Career & Technical Education (CTE) - Class Scope and Sequences

Human & Public Services (HPS) Pathway		
Career Cluster	**KHS Course Name**	**Credit**
Human Development	Child Development (orientation course)	0.5
Textiles, Fashion & Apparel	Fashion Design	0.5
Cooking and Related Culinary Arts	Foods & Nutrition 1 (orientation course)	0.5
	Foods & Nutrition 2	0.5
	Food Science	0.5

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Child Development			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Unit 1 Understanding Child Development	18-25	• Physical, intellectual, and socio-emotional development • Identify the benefits of studying child development • Identify the effects of heredity and environment during the early years of development.

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2	Unit 2 Parenting: Rewards and Responsibilities	18-20	• Children and Parenting • Apply decision-making and problem-solving skills to life situations involving children. • Evaluate the various requirements of special needs children and the impact on school, family, and society.
3	Unit 3 Child development from birth	18-20	• Child development from birth to twelve years of age • Physical, emotional, social, and intellectual aspects of human growth and development from infancy to the adolescent years. • Summarize the birth process. • Explain the stages of prenatal development.
4	Unit 4: Human services/Career exploration	7-10	• Human services/Career exploration • Identify, explore, and discuss career opportunities in the field of child development.

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Fashion Design			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
			This course is not running for the 2025-2026 school year. It will be offered again in 2026-2027.

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Foods & Nutrition 1			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Safety & Sanitation	20	• Kitchen Safety • Kitchen Sanitation
2	Baking	Ongoing	• Measuring skills • Baking techniques • Mise en place • Annotating & following recipes
3	Cooking	Ongoing	• Knife skills • Cooking techniques

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			• Mise en place • Annotating & following recipes

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Foods & Nutrition 2			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Safety & Sanitation	5-7	• Kitchen Safety • Kitchen Sanitation
2	Fruits & Veggies	15	• Knife skills • Cooking techniques • Mise en place • Annotating & following recipes
3	Proteins	20	• Knife skills • Cooking techniques • Mise en place • Annotating & following recipes
4	Dairy	10	• Knife skills • Cooking techniques • Mise en place • Annotating & following recipes
5	Grains	15	• Knife skills • Cooking techniques • Mise en place • Annotating & following recipes
	Project- Food Truck	10	• Business planning skills • Collaboration skills • Knife skills • Cooking techniques • Mise en place • Annotating & following recipes

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Food Science			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
			This course is not running for the 2025-2026 school year. It will be offered again in 2027-2028.

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Career & Technical Education (CTE) - Class Scope and Sequences

Information Technology (IT) Pathway		
Career Cluster	**KHS Course Name**	**Credit**
Computer Science	Computer Science 1 (orientation course)	0.5
	Computer Science 2	0.5
	AP Computer Science A	1.0

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Computer Science 1			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**

1	Basics of Computing & Digital Information	6-8	• **Standard: Students can identify basic hardware components and explain what they do.**
			  ○ explain what a hard drive is and what it does
			  ○ explain what a CPU is and what it does
			  ○ explain what RAM is and what it does
			  ○ state the four parts of the Fetch Execute Cycle
			  ○ explain what “non-volatile” means
			  ○ can explain why the basic hardware components are important to a developer
			• **Standard: Students can represent, interpret, and translate digital information.**

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			○ explain what a bit is ○ explain what bytes are ○ convert a binary number to decimal and vice-a-versa ○ explain what a nibble is ○ convert a hexadecimal number to decimal and vice-a-versa
2	Networks and the Internet	7-9	● **Standard: Students can understand the internet and how it works.** ○ generalize what the internet is ○ discuss the hardware that powers the internet ○ describe what Internet Protocols are ○ understand how the DNS system works ○ know the difference between IPv4 and IPv6 ○ discuss the necessity of Internet Protocols ○ recognize the DNS system as an abstraction ● **Standard: Students can explain how computers exchange information on the internet.** ○ explain how computers communicate using routers. ○ explain the packet process ○ explain how protocols (TCP/IP and HTTP) are vital to the exchange of information on the internet. ○ explain the HyperText Transfer Protocol (HTTP). ○ what considerations are made when choosing a route. ○ discuss how routers are fault-tolerant because of redundancy.
3	Basic Python and Console Interaction	11-13	● **Standard: Students can print, use variables, and take user input in a program.** ○ print text in python ○ declare variables ○ convert variable types ○ incorporate user input in programs ○ properly use variables when taking user input ○ find basic errors in code ○ print multiple variables and/or text in a single print statement ○ use proper naming conventions for variables ○ can successfully debug large blocks of

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			code ○ can use comments to make a program more readable ● **Standard: Students can use basic mathematical functions in programs.** ○ create programs that use basic addition, subtraction, and/or multiplication ○ use “float division” properly in calculations ○ use exponents in calculations ○ take user input to do calculations ○ properly use “floor division” in calculations ○ use the modulus operator properly in a program ○ debug large blocks of code ○ use comments to make a program more readable
4	Conditionals	9-11	● **Standard: Students can use if statements and logical comparisons to control the flow of programs.** ○ create and print the values of boolean variables ○ use if/else statements to control the flow of a program ○ use comparison operators to compare values ○ know the difference between the logical operators (AND, OR, NOT) ○ round values in programs ○ explain the meaning of each comparison operator ○ properly use the logical operators (AND, OR, NOT) ○ properly nest if-else statements
5	Programming Conventions and Structures	6-8	● **Standard: Students can use program development conventions and best practices.** ○ create a simple flowchart to help plan a program ○ create basic pseudocode to help plan out a program ○ use both single line and block comments to improve edibility and readability of code ○ use conventional and descriptive variable naming ○ edit a program’s code with respect to conventions and best practices ○ write code based on a flowchart and/or

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			pseudocode

6	Looping	13-15	• **Standard: Students can use loops effectively in programs.**
			  ○ understand the structure of a loop
			  ○ create a functioning while loop in a program
			  ○ create a functioning for loop in a program
			  ○ decide which type of loop is more appropriate to use for a given task
			  ○ detect and resolve infinite loops
			  ○ can use nested control structures correctly in a program
			  ○ can use break and continue properly in a loop or loops

7	Intro to Data Structures (Lists)	8-10	• **Standard: Students can create, use, and manipulate lists in Python**
			  ○ create a list
			  ○ add items to the end of a list using append()
			  ○ remove a specific item from a list using remove()
			  ○ find the length of a list using len()
			  ○ sort a list of a single data type in ascending order using sort()
			  ○ find the index of an item using index()
			  ○ can insert an item into a list using insert()
			  ○ can remove an item at a specific index using pop()
			  ○ sort a list of a single data type in descending order using sort()

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Computer Science 2			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
			Please refer to the class syllabus for the curriculum outline for this course.

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AP Computer Science A			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
			This course is not running for the 2025-2026 school year. It will be offered again in 2026-2027.

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Career & Technical Education (CTE) - Class Scope and Sequences

Manufacturing, Engineering, Technology & Trades (METT) Pathway		
Career Cluster	**KHS Course Name**	**Credit**
Engineering	Engineering 1 (Introduction to Engineering Design)	0.5
	Engineering 2 (Principles of Engineering)	0.5
	METT - Capstone (Civil Engineering & Architecture)	0.5
Architecture & Construction	CAD 1 (Beginning Drafting)	0.5
	CAD 2 (Architectural Drafting)	0.5
	Construction 1 (Beginning Construction)	0.5
	Construction 2 (Trades & Certifications)	0.5
	METT - Capstone (Civil Engineering & Architecture)	.05
Power, Structural & Technical Systems	Intro to Mechanics	0.5

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Engineering 1 (Introduction to Engineering Design)			
Unit #	Unit Title	Estimated days	Topics Covered:
1	Introduction to Engineering Process	30-40	• Engineering and me. • Systems models. List and provide examples of the steps of the "Engineering Process" used by engineers (Identify Problem, Research, Develop Solutions, Construct Prototype, Evaluate Solution, Redesign if needed). • Engineering Documentation
2	Engineering Disciplines	15-20	• Students will be able to identify and gain knowledge of the at least six disciplines of Engineering: Industrial Engineering, Civil Engineering, Mechanical Engineering, Electrical and Computational Engineering, Biomedical Engineering, AeroSpace Engineering and those branch off these • Presentations of Careers created and shared
3	Computers and Engineering tools	15-30	• Students will develop knowledge of and demonstrate basic understanding of the following Engineering work tools/skills: Electronic Communication, Word Processing, Spreadsheets Programs,Database management CAD,CAM,Reverse Engineering,Technical report writing,Documentation of process

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Engineering 2 (Principles of Engineering)			
Unit #	Unit Title	Estimated days	Topics Covered:
1	Flow Charts and Project management types	7-10	• What are the types of project management • What is the role of a project manager
2	Reverse Engineering	20-30	• The Process of taking apart a product • Documentation of process • BOM Bill of Material

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			• Instruction Manual creation • Improving existing designs
3	Process of Making Products/Projects	25-30	• Research, design, test, collect data, redesign, Then present solutions to selected stakeholders • Utilizing Engineering tools and programs • Manual Creations with directions • Executive summaries will be created to share Engineering Process
4	Personal Summative Project	25-30	• Surveying understand the basic ideas of Surveying • GPS utilize some of the tools used in Global Positioning Systems • Satellite imaging find and use Satellite images to create and visualize projects • AutoCAD use Autocad program to develop plans for my project • Google Earth use the tools to improve my images • Google Maps use the tools in Google Maps to improve my project • Use multiple tools to identify problems and then find solutions to those problems. • Look at a project and identify the Project statement, the Constraints, then utilize them to brainstorm and create solutions • Follow the Engineering Process and document the process

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METT - Capstone (Civil Engineering & Architecture)			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Professional Portfolio Development	30-40	• Creating Resume, Cover letters • Creating Scholarship applications • Interviewing strategies • Self Evaluation of Skills
2	Field Experience Projects	50	• Students will work on personalized projects related to METT Careers that students have selected. • Professional networking • Professional Portfolio

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CAD 1 (Beginning Drafting)			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Introduction to CAD Programs	10-15	• Three programs for one Animal Project • Web based CAD • 2D VS 3D
2	AutoCAD 2D to 3D	15	• Personal Logo project utilizing AutoCAD • Ribbon Tools • Units • Views
3	AutoCAD 2D Car Design	15	• Multi-view drawing • Hatch tools • Title blocks • Text • Image paste • Spline curves • Copy paste
4	Auto CAD for Architecture	45	• Architectural planning • Bubble sketching • Orthographic Sketching • Offset • Units • Creating blocks • Layers • Dimensions

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CAD 2 (Architectural Drafting)			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Architectural plans	50	• Site plans • Electrical plans • Foundation plans • Elevations
2	Commercial design	25	• Work with mock clients to make a design for a commercial or Civil space • Develop plans based off of client needs
3	Portfolio creation	15	• Develop Professional Portfolio and save for future use

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Construction 1 (Beginning Construction)			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Safety	5-7	• Demonstrate and get certified in safe work practices with power tools and shop
2	Personal project Group project	70	• Measuring Accurately to design and build projects • Use the correct Power Saw • Use the Power Nailers • Use the Power Drill/ Screwdriver • Use the Power Sanders/Finishers • Use different Fasteners and select the best one for the application • Finishing, Staining, Painting
3	Blueprint Reading	5-10	• Read basic blueprints and understand symbols • Pass Blueprint certification exam
4	CNC Manufacturing	5	• Utilize design programs and understand basic CNC setup

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Construction 2 (Trades & Certifications)			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Construction based Projects	60	• Measuring Accurately to design and build projects • Use the correct Power Saw • Use the Power Nailers • Use the Power Drill/ Screwdriver • Use the Power Sanders/Finishers • Use different Fasteners and select the best one for the application • Finishing, Staining, Painting
2	OSHA 10 certifications	30	• Industrial • Construction trades

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Intro to Mechanics			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Introduction to the Ag Mechanics Industry	7-10	• Mechanical systems • Efficient design • Engineering Design Process
2	Welding and Fabrication	30	• Safety • The welding industry • OAW Principles • SMAW Principles • Blueprints • CAD/Drafting • Fabrication
3	Energy in Mechanics	7-10	• Energy Forms and Changes • Harnessing energy • Mechanical Energy • Electrical Energy • Chemical Energy
4	Small Engines	30	• Engine Systems and components • 4-stroke theory • 2-stroke theory • Engine diagnosis • Engine Teardown • Automotive industry

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Career & Technical Education (CTE) - Class Scope and Sequences

Work-based Learning		
Career Cluster	**KHS Course Name**	**Credit**
Work-based Learning (both Workplace Experience & Workplace Experience on the Job are taken concurrently)	Workplace Experience	1.0
	Workplace Experience on the Job	1.0

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Workplace Experience			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Economic Systems & Consumer Decision	10	• Analyze economic relationships that exist between households and businesses in the market economy. • Define values, goals, needs, and wants. • Define economic terms and explain the relationships of scarcity, choice, opportunity cost and resource allocation. Determine opportunity costs associated with financial decisions. • Describe how supply and demand are affected by price and outside forces. • Describe the 4 Economic Systems and how scarcity affects how the 3 basic questions are answered.

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			• Recognize the characteristics of different economic systems and assess the impact on consumer choices. • Describe the impact of fiscal and monetary policy on individuals, families, and the community.
2	Economic Systems & Consumer Decision	10	• Analyze economic relationships that exist between households and businesses in the market economy. • Define values, goals, needs, and wants. • Define economic terms and explain the relationships of scarcity, choice, opportunity cost and resource allocation. Determine opportunity costs associated with financial decisions. • Describe how supply and demand are affected by price and outside forces. • Describe the 4 Economic Systems and how scarcity affects how the 3 basic questions are answered. • Recognize the characteristics of different economic systems and assess the impact on consumer choices. • Describe the impact of fiscal and monetary policy on individuals, families, and the community.
3	Banking	10	• Describe the role of the Federal Reserve in the banking system and the economy. • Recognize the important role the FDIC plays in the financial industry, economic stability and the benefit to consumers. • Identify the types of accounts and the amount of money insured by the FDIC. • Recognize the important role banks play in the community and the economy. • Describe 5 services offered by banks and how they affect your decision to choose a bank. • Explain 4 common fees banks charge. • Identify the positives and negatives in opting-in of debit card overdraft protection when opening a checking account. • Identify at least three reasons for using the services of a financial institution, including security, interest, and the ability to track spending. • Identify and describe the purpose of the following endorsements: blank, restrictive and special endorsements. • Differentiate between banks and credit unions. • List the steps and requirements to open a

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			checking account. • Identify the following information on a check: date, check number, pay to the order line, amount of check (numbers), amount of check (written), signature, routing number, account number and memo line. • Prepare a deposit ticket by differentiating between currency, checks, subtotal, less cash received and net deposit. • Properly record transactions in a register and complete required calculations for maintaining an accurate account balance. • Balance a checkbook using a check register, bank statement and bank reconciliation form.
4	Credit	10	• Define credit. • Identify and explain the advantages and disadvantages of using credit. • Distinguish between secured and unsecured credit. • Define annual percentage rate. • Define Grace period. • Differentiate between simple and compound interest and explain how compound interest is a disadvantage to consumers when borrowing. • Define credit score. • Identify the “C’s of credit” and define each component. • Describe the purpose of Truth-in-Lending Act, Fair Credit Reporting Act, Fair Credit Billing Act and Equal Credit Opportunity Act. • Differentiate between subsidized and unsubsidized student loans. • Identify the risks associated with alternative loan sources, including but not limited to: payday loans, title loans, online lending companies. • Describe the disadvantages and advantages of bankruptcy. • Create a plan to limit the risk and impact of identity-theft and fraud.
5	Budgeting	10	• Identify each step in the decision-making process when creating an income/zero based budget. • Differentiate between the four main components of a budget. • Assemble the budget by completing the calculations necessary to identify monthly disposable income. • Categorize and adjust monthly fixed and variable expenses to end with a Zero-Based

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			budget. • Analyze how financial decisions, such as spending vs. saving, have an impact on future finances. • Analyze and compare options for post-secondary education and the impact of student loans.
6	Insurance	5	• Identify the 4 main categories of insurance. • List economic risks including personal risks, property risk, and liability risk. • Identify the following insurance terms: premium, insurer, policy, policy holder. • Compare and contrast the different types of insurance. • Describe the various categories of automobile insurance. • List the factors that affect the cost of automobile insurance and how to lower insurance premiums. • Explain the reasons for purchasing homeowners/renters insurance: including the requirements of a mortgage company or landlord. • Explain the reasons people buy life insurance. • Differentiate between whole life and term insurance. • Identify the differences between individual and group health insurance.
7	House Buying	10	• Compare the advantages and disadvantages of buying vs. renting an apartment or home. • Interpret the important information on a rental lease contract including price, rent due date, security deposit, and restrictions. • Identify at least three major costs to consider when buying a home. • Differentiate between several types of mortgages offered to a consumer. • Compare and contrast between a fixed or adjustable rate mortgage, and avoiding the pitfalls of subprime loans and predatory lending.
8	Saving & Investing	10	• Know the difference between saving and investing. • Explain the importance of liquidity and emergency saving. • Explain the value of long term investing and compound interest. • Compare and contrast the following forms of investments: bonds, stocks, and mutual funds. • Describe different methods of retirement planning, including pensions, 401K, 403B,

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			Traditional IRA, Roth IRA and Social Security.

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Workplace Experience on the Job			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
			There are no classroom components

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Fine Arts - Class Scope and Sequences

Year Long Ensemble Classes:	
Treble Choir	Band Percussion Ensemble
Bass/Tenor Choir	Concert Band
Concert Choir	Symphonic Band
Madrigals/Chamber Choir	Wind Ensemble
Bella Voce	Jazz Band

Year Long Elective Classes:	
Music Theory 2	AP Art

Semester Electives: Can be taken concurrently with required science classes depending on the grade level			
Piano Keyboarding	Art and Society	Art 2D 1	Art 3D 2
Music Theory 1	Photography 1	Art 2D 2	Acting Essentials
Studio Art	Photography 2	Art 3D 1	Dual Credit Theatre Appreciation

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Treble Choir			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
1	Concert Performance	Holiday (13 weeks) Winter (8 - 9 weeks) Spring (10 - 11 weeks)	• Holiday Concert • Winter Choral Concert • Spring Choral Concert
2	Rehearsal Performance	Aligned to concerts	• Rehearsal performance feedback will be entered every two weeks.
3	Music Literacy	Three weeks per unit - at the end of a concert cycle	• Rhythmic Unit • Melodic Unit • Terms Unit
4	Individual Performance	Summative	• Scales and Triads • Smartmusic Assessment

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Bass/Tenor Choir			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
1	Concert Performance	Holiday (13 weeks) Winter (8 - 9 weeks) Spring (10 - 11 weeks)	• Holiday Concert • Winter Choral Concert • Spring Choral Concert
2	Rehearsal Performance	Aligned to concerts	• Rehearsal performance feedback will be entered every two weeks.
3	Music Literacy	Three weeks per unit - at the end of a concert cycle	• Rhythmic Unit • Melodic Unit • Terms Unit
4	Individual	Summative	• Scales and Triads

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	Performance		• Smartmusic Assessments

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Concert Choir			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
1	Concert Performance	Holiday (13 weeks) Winter (8 - 9 weeks) Spring (10 - 11 weeks)	• Holiday Concert • Winter Choral Concert • Spring Choral Concert
2	Rehearsal Performance	Aligned to concerts	• Rehearsal performance feedback will be entered every two weeks.
3	Music Literacy	Three weeks per unit - end of concert cycle	• Rhythmic Unit • Melodic Unit • Terms Unit
4	Individual Performance	Summative	• Scales and Triads • Smartmusic Assessments

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Madrigals/Chamber Choir			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
1	Concert Performance	Holiday (13 weeks) Madrigal Dinner (15 - 16 weeks) Winter (8 - 9 weeks) Spring (10 - 11 weeks)	• Holiday Concert • Madrigal Dinner • Winter Choral Concert • Spring Choral Concert
2	Rehearsal Performance	Aligned to concerts	• Rehearsal performance feedback will be entered every two weeks.
3	Music Literacy	Three weeks per unit - at the end of a concert cycle	• Rhythmic Unit • Melodic Unit

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4	Individual Performance	Summative	• Scales and Triads • Smartmusic Assessments

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Bella Voce			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
1	Concert Performance	Holiday (13 weeks) Winter (8 - 9 weeks) Spring (10 - 11 weeks)	• Holiday Concert • Winter Choral Concert • Spring Choral Concert
2	Rehearsal Performance	Aligned to concerts	• Rehearsal performance feedback will be entered every two weeks.
3	Music Literacy	Three weeks per unit - at the end of a concert cycle	• Rhythmic Unit • Melodic Unit
4	Individual Performance	Summative	• Scales and Triads • Smartmusic Assessments

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Band Percussion Ensemble			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
			Please refer to the class syllabus for the curriculum outline for this course.

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Concert Band			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
			Please refer to the class syllabus for the curriculum outline for this course.

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Symphonic Band			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
			Please refer to the class syllabus for the curriculum outline for this course.

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Wind Ensemble			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
			Please refer to the class syllabus for the curriculum outline for this course.

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Jazz Band			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
			Please refer to the class syllabus for the curriculum outline for this course.

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Music Theory 2			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
			This course is not running for the 2025-2026 school year. It will be offered again in 2026-2027.

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AP Art			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
			Please refer to the class syllabus for the curriculum outline for this course.

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Piano Keyboarding			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
			This course is not running for the 2025-2026 school year. It will be offered again in 2026-2027.

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Music Theory 1			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
			This course is not running for the 2025-2026 school year. It will be offered again in 2026-2027.

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Studio Art			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
			Please refer to the class syllabus for the curriculum outline for this course.

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Art and Society			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
			Please refer to the class syllabus for the curriculum outline for this course.

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Photography 1			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
1	"About Me" Photo Slides Presentation	7	Photography basics
2	Weekly Themed Photos	Ongoing for 9-14 weeks	• Compositional Strategies • Selecting only 1 photo/taking multiples • What is a theme? • Editing/Enhancing
3	Alternative Art Projects using Photography	Ongoing/Overlapping when projects finish 30 Days	• Paint • Embroidery • Collage • Printmaking • Drawing
4	Influential Art Historical Photographer Presentation	7	• Personal History • Themed Body of Work • Quote relating to photography • Art Historical Information
5	Elements of Art	10	• Taking photos which portray the Elements of Art

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	Slide Show		
6	Lighting Strategies	10	
7	Portraiture	10	•
8	Final Portfolio	Ongoing/Overlapping when projects finish/5 days at the end of semester/3 presentation days	•

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Photography 2			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
1	"About Me" Photo Slides Presentation	7	• Photography basics
2	Weekly Themed Photos	Ongoing for 9-14 weeks	• Compositional Strategies • Selecting only 1 photo/taking multiples • What is a theme? • Editing/Enhancing
3	Alternative Art Projects using Photography	Ongoing/Overlapping when projects finish 30 Days	• Paint • Embroidery • Collage • Printmaking • Drawing
4	Influential Art Historical Photographer Presentation	7	• Personal History • Themed Body of Work • Quote relating to photography • Art Historical Information
5	Principles of Art Slide Show	10	•
6	"In the Style of" A Photographer		
7			•

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8	Final Portfolio	Ongoing/Overlapping when projects finish/5 days at the end of semester/3 presentation days	•

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Art 2D 1			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
1	Sketchbook	Semester long	• Weekly 10 min drawing prompts • Personal drawing goal • Practice skills and techniques • Experiment with personal style and expression
2	Drawing from observation	2-3 weeks	• Contour line drawing • Still life • Proportions and composition • Value and shading
3	Notans	1 week	• Positive and negative space • Shape and form
4	Radial Print Block Pattern	1-2 weeks	• Pattern and contrast • Carving skills and techniques for block printing • Printing techniques
5	Color: Disco Ball Painting	2 weeks	• Color theory • Acrylic painting techniques
6	Perspective drawing	2-3 weeks	• 1 point perspective • 2 point perspective • Atmospheric perspective
7	Self Portrait in the style of…	2 weeks	• Human proportions • Understanding artist's style (emulating style and technique) • Acrylic painting skills and techniques
8	Self Expression	2 weeks	• Self reflection and expression • Use of sketchbook as inspiration for larger work

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Art 2D 2			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
1	Sketchbook	Semester long	• Weekly 10 min sketchbook prompts • Personal goal • Development of personal style and expression • Practice skills and techniques
2	Boxboard Prints	2 weeks	• Texture through mark making • Observation drawing • Intaglio and etching printmaking techniques
3	Impressionist inspired landscape	2 weeks	• Oil pastel skills and techniques • Atmospheric perspective • Impressionist style/mark making
4	Skateboard Deck Design	3 weeks	• Personal expression within a theme • Acrylic painting techniques on wood
5	Self-Portrait Collage	3-4 weeks	• Gelli plate printing techniques • Color schemes • Pattern and texture
6	Self Expression (series of 3)	4 weeks	• Self reflection and expression • Use of sketchbook as inspiration for series work

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Art 3D 1			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
1	Clay: Slab Coasters	1-2 weeks	• Stages of clay • Wedging clay • Rolling slabs by hand • Carving clay • Underglaze and glazing techniques
2	Clay: Melted Ice Cream Cones	1-2 weeks	• Pinch pots • Rolling textures in clay slabs • Manipulating soft slabs • Scoring and slipping to attach clay • Oxide stains and glazing techniques
3	Clay: Tic Tac Toe	2-3 weeks	• Personal expression

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	Game Boards		• Thematic imagery • Underglazing techniques • Product/game design
4	Clay: Slab Mugs (set of 2)	2 weeks	• Utilitarian work • Creating and attaching handles • Personal expression • Silkscreening and Sgraffito with underglazes
5	Clay: Coil Pot Construction	3-4 weeks	• Rolling and attaching coils by hand • Large scale construction • Layer glazes
6	Non-Clay: Fast food sculpture	1-2 weeks	• Manipulating materials to emulate specific textures • Surface decoration using paint

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Art 3D 2			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
1	Clay: Sprigs and stamps	1 week	• Texture and pattern
2	Clay: pinch pot funko pop bobble head	2 weeks	• Personal expression • Emulating style (product development) • Use of Balance in construction • Underglaze techniques
3	Clay: Serving dish using Pattern sprigs and stamps	1-2 week	• Use of molds to create form • Texture and Pattern (use of sprigs and stamps) • Peacock Glaze technique
4	Clay: Lantern OR bird feeder	2-3 weeks	• Template work • Soft and hard slab manipulation • Operating the slab roller • Sgraffito techniques
5	Clay: Coil bust (Head and shoulders)	3-4 weeks	• Rolling, attaching, and smoothing coils to make forms • Large scale construction • Personal expression
6	Clay: Pottery Wheel work	At least 1 week throughout the semester	• Centering and manipulating clay on the pottery wheel • Journal or progress and learning

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			• Forming a cylinder (4 in or taller cup)
7	Non-Clay: paper mache pets	2 weeks	• Additive sculptural techniques • Paper mache and paper clay • Expression of movement and emotion (capturing a moment in time)

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AP Art (2D Design, 3D Design, and Drawing)			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
			Please refer to the class syllabus for the curriculum outline for this course.

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Acting Essentials			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
			Please refer to the class syllabus for the curriculum outline for this course.

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Dual Credit Theatre Appreciation			
Unit #	**Standards/ Unit Title**	**Estimated days**	**Topics Covered:**
			Please refer to the class syllabus for the curriculum outline for this course.

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Language Arts - Class Scope and Sequences

Requirements and Classes: Students need 4.5 English credits to graduate with the .5 credit being Communication Studies.			
Freshman Year	**Sophomore Year**	**Junior Year**	**Senior Year**
English 9 (1 year)	English 10 (1 year)	English 11: Dreams and Nightmares (1 year)	Advanced Composition (.5 year) OR Writing for College and Career (.5 year)
English 9 Enhanced (1 year)	English 10 Enhanced (1 year)	English 11: Literature and Film (1 year)	Senior Genre Study (choose one): • Contemporary Literature • Literary Nonfiction • Science Fiction and Fantasy (.5 year each)
Instructional English 9 (1 year)	Instructional English 10 (1 year)	Instructional English 11 (1 year)	Instructional English 12 (1 year)
	Communication Studies (.5 year) This course can be taken in sophomore, junior, or senior year.		

Electives: Can be taken concurrently with required English classes, depending on the grade level		
Yearbook Production	Journalism 2 Studies and Publications	Creative Writing 1
Journalism 1	Journalism 2 Editorial Leadership	Creative Writing 2

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Advanced Placement Options	
AP English Language and Composition (Junior Year)	AP English Literature and Composition (Senior Year)

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English 9			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Narrative Writing	10	• Introducing writing for a purpose. • Narrative writing using sensory descriptive and figurative language to enhance writing. • Effective storytelling techniques. • Foundations of grammar: comma rules, apostrophes, etc.
2	Short Story Analysis	30	• Analyze stories through the literary device lenses of situational irony, dramatic irony, conflict, character, diction etc. • Explore how literary elements are used to create an effect on a literary text. • How literary elements and/or characters are used to develop a text's themes and relate it to the author's purpose.
3	Research and Informational Writing	33	• Collect appropriate source for audience and purpose • Analyze the reliability of sources ○ Focus on an author's authority and purpose • Write an informative essay targeted at a specific audience • Follow formal writing conventions
4	*Shakespearian Drama Current: Romeo and Juliet*	33	• Background & history of Shakespearian drama • Sonnet form • Analyze and explain how through the literary devices: figurative language, imagery, symbolism, etc. used to communicate a complex meaning.
5	Argument Project	20	• Focused on refining and building on the skills learned in the Research and Informational unit.
6	Whole Class Novel	32	• Explore historical background

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	Current: *The Hate U Give*		• Analyze novel through the literary device lenses of character, conflict, and theme. • Explore the idea of community and the connectedness of people within a community.
7	Grammar	Embedded within the units	• Dependent/Independent Clauses • Fixing fragments/run-ons • Semicolon usage • Comma usage
8	Vocabulary	Embedded with the units	• Using words that are specific to the study of ELA or are relevant to the current unit.

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English 9 Enhanced			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Literary Analysis		• How and Why of literary analysis. • Resources of Language and Narrative Techniques. • Incorporating evidence smoothly. • Fragments and run-ons/independent and dependent clauses. • Summative: Literary analysis essay
2	Theme and Character Analysis		• Theme statements • Theme analysis • Characterization • Character arcs • Selecting evidence • Summative: Production proposal for the anchor text.
3	Argument and Intro to Rhetorical Analysis		• Logos, ethos, and pathos. • Claim and counterclaim • Argument structure • Summative: Argumentative essay over *12 Angry Men.*
4	Theme and Literary Analysis		• Character progressions/connections to theme • Shakespeare background information • Literary analysis of how an author's choices create meaning. • Summative: AP style timed write and a theme analysis.

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5	Argument/ Research		• Different types of sources and when to use them. • Research skills. • Argument structures. • MLA formatting • Summative: Argumentative research paper.
6	Rhetorical Analysis		• Rhetorical strategies • How to analyze others' rhetoric. What makes an argument effective? • Students analyze their own use of rhetorical devices.
7	Character Analysis		• Characterization • Character arcs • Summative: Character analysis project over the independent novel.

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Instructional English 9			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Narrative Writing "Image Description"	5	• Effective storytelling techniques. • Foundations of grammar: comma rules, (apostrophes, etc.)
2	Character Analysis "Who Would Own This"	10	• Character development using Direct and Indirect characterizations • Summative: Creative writing - independent short story development
3	Theme "Short video: theme analysis"	5	• Analyze how the theme drives the story. • Explore theme concepts. • Identifying and writing out the message of the theme.
4	Short Story Analysis "Literary Devices"	30	• Literary devices such as imagery, metaphors, dramatic irony, symbolism, diction etc. • How literary elements are used to create an effect on a literary text. • Direct and indirect characterization • How literary elements and/or characters are used to develop a text's themes and relate it to the author's purpose. • Summative: CER (theme, direct text evidence)

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5	Novel Study “When I was the Greatest”	40	• Analyze story structure (story arc) and how it drives the story • Direct and indirect characterization • Static and dynamic characters • Summative: presentations (multi-modal options)
6	Persuasive/ Opinion “writing”	15	• Developing effective claims/thesis statements • Researching and sourcing a variety of sources to support claims (newspapers, interviews, research articles) • Evaluating the effectiveness of evidence. • Summative: CERPersuasive essay: opinion with supporting opinions (research) • Presentations
7	Research and Argument “Reading”	15	• Developing effective claims/thesis statements • Researching and sourcing a variety of sources to support claims (newspapers, interviews, research articles, • Evaluating the effectiveness of evidence. • The rhetorical appeals (ethos, pathos, logos) and how they relate to argument. • The value of audience and purpose as it relates to argument/how to craft an argument to a writer’s audience and purpose.
8	Novel Study “One of Us is Lying”	40	• Analyze how the theme drives the story. • Direct and indirect characterization • Static and dynamic characters • How literary elements and/or characters are used to develop a text’s themes and relate it to the author’s purpose. • Summative: presentations (multimedia)
9	Theme	2	• Analyze how the theme drives the story. • Explore theme concepts. • Identifying and writing out the message of the theme.
10	Grammar	10-20 Days throughout the year	• Dependent/Independent Clauses • Fixing fragments/run-ons • Semicolon usage • Comma usage

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English 10			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Character and conflict using novellas	20	• Review STEAL for indirect characterization • Analyze the impact of a complex character using plot and theme
2	Exploring Theme using a whole class novel. (currently using *Internment)*	30	• Theme analysis with the focus on how an author develops an overall message • Word analysis by examining why certain words are chosen and how they are used within the context of the writing
3	Informational Writing/Research	24	• Develop strong research questions • Strengthen source analysis by using CRAAP test to examine the validity of those sources • Employ MLA style guide to create a bibliography • Annotated Bibliography • Write a fully developed research paper
4	Literature Circles	25	• Independent study of Author's structure choice, literary elements, and theme analysis • Development of effective group discussion questions • Student conducted relevant small group discussions that showcase student knowledge and understanding
5	Informational writing: Feature story	25	• Building journalistic writing skills by doing the following: • Collect appropriate sources for audience and purpose • Analyze the reliability of sources • Write an informative feature story incorporating basic journalistic techniques • Creating a correctly formatted bibliography using sources that have been evaluated using CRAAP
6	Author's Structural Choices	10	• Impact on reader understanding of message

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7	Character Arc Study with student selected text	25	• Explore the literary meaning and implications of a character arc • Identify and and analyze Character Arc development through a specific novel • Communicate analysis in writing
8	Grammar	Embedded within the units	• Dependent/Independent Clauses • Phases • Apostrope use
9	Vocabulary	Embedded with the units	• Using words that build towards the development of a strong and literate vocabulary.

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English 10 Enhanced			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Intro to Literary analysis	25	• Analysis of poetry • Integrate grammar - intentional use of punctuation • Integrate vocabulary - poetic terms, poetry types • Go over what titles are italicized or put in quotes • Intro to AP Lit expectations • Timed essay using AP style prompt
2	Theme: *Slaughterhouse Five*	30	• Study Slaughterhouse-Five • Analyze resources of language and narrative techniques • Integrate grammar - sentence types • Integrate vocabulary - resources of language and narrative technique terms as well as starting to integrate tonal words. • Thematic analysis essay or project option
3	Character: Independent Novel	25	• Independent Reading text • Character analysis • Connecting resources of language to characterization • Grammar integration • Vocabulary integration • Character analysis project
4	Julius Caesar/ Rhetorical	30	• Intro to AP Lang Rhetorical Analysis essay • Defining rhetoric

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	Analysis		• Rhetorical strategies vs. rhetorical appeals • Rhetorical analysis • Reading and watching *The Tragedy of Julius Caesar* • Grammar integration • Vocabulary integration • Rhetorical analysis essay
5	Argument	25	• Intro to AP Lang argumentative essay • Defining Argumentation • Structuring argumentative writing • Supporting an argument • Grammar integration • Vocabulary integration • Argumentative paper
6	Genre Study	25	• Student choice unit • Independent reading text - genre specific • Research of genre/understanding of genre • In-class group activities and whole group discussions • Choice summative: creative writing piece or essay.

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Instructional English 10			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Character Analysis	10	• Character analysis • STEAL
2	Novel study (Iron to Iron)	25	• Direct and indirect characterization • Static and dynamic characters • How literary elements and/or characters are used to develop a text's themes and relate it to the author's purpose.
3	Theme/ novel (Of Mice and Men)	30	• Theme analysis • Word analysis • Writing skills (essay)
4	Argumentative Research	15	• Source analysis (CRAAP test) • MLA Works Cited formatting • Annotated Bibliography
5	Tone & Mood	10	• Develop the meaning • Setting, character, or an event- meaning

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6	Literature Circles (All American Boys)	40	• Theme analysis • Author's structure choice in fiction • Literary elements
7	Characters in short story	20	• Direct and indirect characterization • Static and dynamic characters • How literary elements and/or characters are used to develop a text's themes and relate it to the author's purpose. • STEAL
7	Grammar	15 times throughout the semester (or when needed)	• Dependent/Independent Clauses • Fixing fragments/run-ons • Semicolon usage • Comma usage

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English 11: Dreams and Nightmares			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	What is the American Dream?	25	• Claims • Connecting claims to evidence
2	The Great Gatsby	21	• Theme analysis • Style & structure analysis • Transitions (vertical & horizontal) • Claims • Connecting evidence to claim • Writing in academic style • Spelling/grammar
3	How do dreams influence reality?	20	• Participate in a Lit Circle • Theme analysis • Connecting evidence to claim
4	Challenging the Status Quo	25	• Transitions (vertical & horizontal) • Claims • Connecting evidence to claim • Spelling/grammar
5	Utopia	20	• Theme analysis • Style & structure analysis
6	Dystopian Lit Circles	20	• Participate in a Lit Circle • Theme analysis

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7	Independent Project	13	• Theme analysis • Claims • Connecting evidence to claim

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English 11: Literature and Film			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Style Analysis-Hitchcock	32	• Film vocabulary • Author's purpose • How and why analysis • Formal tone • Grammar--apostrophes/fragments and run-ons
2	Theme-Villains/ Morals and Ethics	30	• Theme statements • Theme analysis through character,conflict, or symbols • Apt and specific evidence
3	Research Paper	18	• Claims • Transitions (vertical and horizontal) • Connecting evidence to claim. • CRAAP test (reliable sources) • Formal research paper • Counterclaims/refutation
4	Rhetorical Analysis	30	• SPACECat • Rhetorical Devices • How does an author create an argument? • How is an argument created visually? • How does an argument impact the audience?
5	Theme-Growing Up	30	• Theme statements • Theme analysis through character,conflict, or symbols • Apt and specific evidence
6	AFI Argument	30	• Claims • Transitions (vertical and horizontal) • Connecting evidence to claim. • Counterclaims/refutation

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Instructional English 11			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Fiction Genre & Short Story Study	3 Weeks (15 days)	• Genre Characteristics • Plot Types • Literary Devices
2	Mystery Novel Study	4-5 Weeks (20-25 days)	• Evidence • Summary (Writing) • Grammar
3	Short Story Analysis Study	3 Weeks (15 days)	• Character Analysis (STEAL) • Evidence • Essay Structure (Writing)
4	The Body Novella Study	4-5 Weeks (20-25 days)	• Literary Devices • Figurative Language • Essay Structure (Writing)
5	Memoir	4-5 Weeks (20-25 days)	• Point of view • Literary elements, figurative language & structure
6	Nonfiction Article Study	3-4 Weeks (15-20 days)	• Non fiction Characteristics • Diction, Rhetorical Analysis • Argumentative Essay (Writing)
7	Topic Research	3 Weeks	• Research & evaluating sources • Argumentative Essay (Writing)

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English 12: Contemporary Literature			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Structure	15	• Basic Structure • Chronology • Point of View • Conflict • Protagonist / Antagonist • Classic Plot Structure • Plot techniques • Setting

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			• Tropes
2	Language	15	• Style • Voice Features • Repetition / Motifs • Tone / Tone Shift • Connotation • Irony • Figurative Language • Sound Devices • Imagery • Mood
3	Theme	20	• Thematic ideas and statements • Author's purpose • Thematic connections from other literary elements - character, conflict, motif • Annotation strategies • Text evidence support for thematic ideas
4	Character	20	• Character traits • Static or Dynamic- • Flat/Simple or Round/Complex • Direct characterization • Indirect characterization = STEAL • Backstory • Motivation • Archetype

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English 12: Literary Nonfiction			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Structure	15	• Basic Structure • Chronology • Point of View • Conflict: • Protagonist / Antagonist • Classic Plot Structure • Plot techniques • Setting • Tropes
2	Language	15	• Style • Voice Features • Repetition / Motifs • Tone / Tone Shift

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			• Connotation • Irony • Figurative Language • Sound Devices • Imagery • Mood
3	Theme	20	• Thematic ideas and statements • Author's purpose • Thematic connections from other literary elements - character, conflict, motif • Annotation strategies • Text evidence support for thematic ideas
4	Character	20	• Character traits • Static or Dynamic- • Flat/Simple or Round/Complex • Direct characterization • Indirect characterization = STEAL • Backstory • Motivation • Archetype

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English 12: Science Fiction and Fantasy			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Structure	15	• Basic Structure • Chronology • Point of View • Conflict: • Protagonist / Antagonist • Classic Plot Structure • Plot techniques • Setting • Tropes
2	Language	15	• Style • Voice Features • Repetition / Motifs • Tone / Tone Shift • Connotation • Irony • Figurative Language • Sound Devices • Imagery • Mood

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3	Theme	20	• Thematic ideas and statements • Author's purpose • Thematic connections from other literary elements - character, conflict, motif • Annotation strategies • Text evidence support for thematic ideas
4	Character	20	• Character traits • Static or Dynamic- • Flat/Simple or Round/Complex • Direct characterization • Indirect characterization = STEAL • Backstory • Motivation • Archetype

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English 12: Writing for College and Career			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**

1	Career Writing	10-12	• Email writing
			  ○ Writing for audience
			  ○ Subject line
			  ○ Intro/salutation
			  ○ body
			  ○ Closing/salutation
			  ○ cc/bc/ reply all

2	Personal Narrative	14+-	• Identifying core values - who am I? • College application/scholarship letters • Job interview answer writing
3	Research Paper	14-21	• Evidence • Source evaluation/research • Claims • Counterclaims
4	Choice Writing	14+-	• Refining proficiency of skills • Choice Writing Options •
5	Electronic portfolio	2	• Creating the portfolio • Reflecting on work

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English 12: Advanced Composition			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Personal Narrative	20	• Structural choices in narrative writing • Voice and style features • Professional author- narrative analysis • Writing Process
2	Literary Analysis	25	• Introduction to critical theory w/examples • Critical Lenses- introduction, exploration, application • Critical Lens analysis • Introduction to synthesis
3	Research Paper	35	• Research- approach and process • Research claim development • Source accuracy and relevance- Annotated Bibliography • Writing Process • Synthesis

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Instructional English 12			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**

1	Personal Narrative (Language Use)	20	• Literary lineage (Students previous exposure to text, film, story)
			• Identifying core values/beliefs
			• Language Use
			  ○ Imagery
			  ○ Figurative Language
			  ○ Diction and Connotation

2	Science Fiction Literary Analysis (Structure)	25	• Structure
			  ○ Science Fiction Tropes
			  ○ Protagonist/Antagonist
			  ○ Plot Structure
			  ○ Conflict

3	Fantasy Literary Analysis (Character)	25	• Characterization
			  ○ Direct vs. Indirect (STEAL)
			  ○ Motivation (wants vs. needs)
			  ○ Archetypes

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4	Literary Analysis (Theme)	25	• Theme Lenses
			  ○ Adversity
			  ○ Friendship
			  ○ Sacrifice
			• Thematic Statements
			• Connecting structural, language, and character elements of story to overarching theme and meaning

5	Compare and Contrast	20	• Evidence, Analysis, and Evaluation of two texts and how they intersect with one another
			  ○ Fiction
			  ○ Non-Fiction

6	Career Writing	20	• Intended Audience/Purpose
			  ○ Email Writing
			  ○ Cover Letter and Resume
			  ○ Job Interview Questions

7	Choice Writing	10	• Examples: Career/Occupation Research Paper, Senior Speech, Movie Review, Short Story, etc.

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Communication Studies			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Intro	Flexible	• Fear of public speaking • General organization of presentation • 'The Person I Admire Most' presentation • Book Chapters: 14, 2
2	Informative	Flexible	• Book Chapters: 11,12,15 • developing and researching topics • organizing different types of presentations • relevance
3	Demonstration	Flexible	• Book Chapters: 13, 5 • listening and responding • adapting verbally and visually
4	Group (2)	Flexible	• Book Chapters: 9, 10 • communicating in groups • problem solving in groups
5	Persuasion	Flexible	• Book Chapter: 16 • the art of persuasion

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6	Reassessment/ Final		• Individualized instruction

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Yearbook Production			
Production Cycle	**Skills**	**Estimated days**	**Topics Covered:**

1A	Introduction	20	• Getting to know you
			• Basic Journalism Principles
			  ○ The responsibility of a reporter
			  ○ Copyright basics
			  ○ First Amendment basics
			• Characteristics of a news story
			• Staff roles and responsibilities
			• Understanding Theme
			• Evaluating other yearbooks
			• Photography quick start
			  ○ Camera basics
			  ○ Photo composition
			  ○ Uploading photos to the yearbook drive
			• Yearbook Distribution

1B	Production Cycle 1	25	• Staff roles and responsibilities II: cross training and staff selection
			• Theme proposals
			  ○ Developing story line
			  ○ Understanding visual elements
			  ○ Understanding verbal elements
			• Covering the school
			  ○ Mastering traditional coverage
			  ○ Ladder planning
			  ○ Record keeping
			  ○ Non-traditional coverage: umbrella and chronological
			• Interviewing basics
			  ○ Interview analysis
			  ○ Interviewing project
			• Story writing basics
			• Caption writing basics
			• Planning a spread (coverage)
			• Introduction to design
			  ○ Hierarchy
			  ○ Modular design
			  ○ Planning a spread (design)
			  ○ Spacing
			• Photography skills: lighting, lenses, and location
			• Editing skills

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			• Complete deadline 1 projects

2	Production Cycle 2	30	• Reporting and writing skills
			  ○ Identifying angle
			  ○ Getting strong quotes
			  ○ Alternative copy
			  ○ Voice and tense
			  ○ Strong verbs
			  ○ Revising
			  ○ Leads
			  ○ Headlines
			  ○ AP Style
			• Planning individual spreads
			• Design skills
			  ○ Principles of design
			  ○ Basic typography
			  ○ Finalizing style book
			• Photography skills: photo selection, cropping, photo ethics
			• Editing skills
			• Complete deadline 2 projects
			• Plan spring semester coverage

3	Production Cycle 3	20 (ongoing)	• Students will work with teacher, editors, and staff to plan coverage for stories, photographs, and page design • Students will meet individual and group goals to ensure yearbook deadlines are met. • Each cycle will include preplanning, coverage, design, presentation, editing, and finalizing of work • AP Style
4	Production Cycle 4	20 (ongoing)	• Students will work with teacher, editors, and staff to plan coverage for stories, photographs, and page design • Students will meet individual and group goals to ensure yearbook deadlines are met. • Each cycle will include preplanning, coverage, design, presentation, editing, and finalizing of work • Club picture day
5	Production Cycle 5	20 (ongoing)	• Students will work with teacher, editors, and staff to plan coverage for stories, photographs, and page design • Students will meet individual and group goals to ensure yearbook deadlines are met. • Each cycle will include preplanning, coverage, design, presentation, editing, and finalizing of work

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			• Special topics: Advertising and sales, other topics as they arise
6	Production Cycle 6	20 (ongoing)	• Students will work with teacher, editors, and staff to plan coverage for stories, photographs, and page design • Students will meet individual and group goals to ensure yearbook deadlines are met. • Each cycle will include preplanning, coverage, design, presentation, editing, and finalizing of work • Planning for next year/theme proposal

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Journalism 1			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Introduction to News Writing	14 days	• Responsibilities and roles of a journalist • Rules and expectations within our program • The role of a journalist in our society, in our community, and in our school • First Amendment overview • Interviewing techniques and practice • Email etiquette and practice • Note taking, recording, and transcribing practice • Basic photography expectations and practice • Caption-writing basics • Characteristics of news • Lead types • 5Ws and H • Open questions vs. closed questions (and the purpose / use of each) • Source identification • Organizational approach to news (straight lead, nut graph, LNQTQ, inverted pyramid) • Transitions into quotes, quote formatting, and quote attributions • Copy editing basics • Creation of a hypothetical news story based on AI-created scenarios
2	Introduction to Feature Writing	16 days	• Characteristics of features • Overview of types of features • Lead types suitable for features • Continuation of interviewing techniques and practice • Organizational structure (and flexibility) of

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			features • Integration of sensory details, scene setting, anecdotes, big picture context, and exploded moments • Asking the right questions of the right sources • Recognizing when and learning how to incorporate research • Continuation of copy editing practice • Introduction to InDesign basics • Creation of first InDesign page
3	Introduction to Opinion Writing	16	• Differences between news, feature, and opinion • Characteristics of opinions • Types of opinions • Rationale for opinion writing in a broader context • Opinion writing techniques and strategies • Source identification for opinion stories • Arrangement of arguments • How to select and address counterarguments • Continuation of copy editing practice • Continuation of InDesign skill development • Creation of second InDesign page
4	Press Law and Special Interest Projects	14	• Legal aspects and responsibilities of journalists • Historical examples of significant cases involving journalism and the law • Introduction to copyright, direct and indirect censorship, libel, slander, false light, misappropriation, FOIA, reporter's privilege, open meeting laws, invasion of privacy, and fair use • Various First Amendment lessons • Overview of Tinker v. Des Moines and Hazelwood v. Kuhlmeier • Research presentations involving a press law issue that students determine for themselves • Proposal and eventual approval of a Special Interest Project (SIP) that relates each student's individual passion with some aspect of journalism (to be sustained and developed throughout the rest of the year) • Development of short- and long-term goals, intended outcomes, an action plan, and a calendar in relation to SIPs
5	Introduction to Photo Storytelling	15	• Introduction to photography basics (typically featuring a variety of guest speakers) • Practice using *Krier* cameras • Examination of similarities and differences between standard print captions and captions

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			more conducive to photo stories • Photo storytelling practice (to tell a personal story) • Photo storytelling contest (using past Sectional prompt) • Continuation of copy editing practice • Continuation of InDesign skill development • Creation of a full InDesign spread similar to *Krier* photos pages and using an original photo story based on an idea each student pitches
6	In-Depth News Writing	20	• Shifting the angle of a straight news story to advance its depth and complexity • Identifying a story suited for an in-depth approach • Continuation of interviewing techniques and practice • Research practices • Sourcing and verification practices • Fact-checking procedures and practice • Balancing fact-based storytelling with straight news elements • Continuation of copy editing practice • Continuation of InDesign skill development • Creation of a full InDesign spread similar to *Krier* centerspread and using an original in-depth news story based on an idea each student pitches
7	Profile Features	20	• Characteristics of a profile feature • Similarities and differences between profiles and other types of features • Identification and selection of appropriate profile subject candidates • Interviewing techniques suitable to an in-depth profile interview and corresponding practice with Meet-the-Reporter assignment • Lead types suitable for profile features • Organizational structure (and flexibility) of profile features • Integration of sensory details, scene setting, anecdotes, big picture context, and exploded moments • Asking the right questions of the right sources • Continuation of copy editing practice • Continuation of InDesign skill development • Creation of a full InDesign spread similar to *Krier* profile page and using an original profile feature based on a profile subject each student pitches
8	Review, Advice,	16	• Similarities and differences between traditional

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	and Editorial Writing		opinion stories, reviews, and advice columns • Similarities and differences between opinion vs. editorial • Characteristics of reviews, advice columns, and editorials • Types of editorials • Purpose of editorials • Rationale for editorial writing in a broader context • Techniques and strategies for review writing, advice columns, and editorials • Source identification for editorials • Arrangement of arguments in an editorial • How to select and address counterarguments in an editorial • Continuation of copy editing practice • Continuation of InDesign skill development • Creation of an InDesign page that is appropriate for the story a student chooses to use
9	Putting it All Together and Transitioning to Journalism 2	24	• Application for second-year roles based on job descriptions and personal interests developed throughout the year • Interviews with upper-level staff for next year's roles • Collaborative creation of mini-*Kriers* within small groups (where all content is determined and then created by each group) • Presentation of Special Interest Projects • The role of advertising and the selection of prospective buyers • Meetings with the new group of executives to start brainstorming and making decisions for next year • Summer story assignments and planning documents • Summer design workshop selection

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Journalism 2: Editorial Leadership			
Production Cycle	**Unit Title**	**Estimated days**	**Topics Covered:** Every topic that is covered in either upper-level course is one that the students started to learn during Journalism 1. If you look at the Journalism 1 scope and sequence, you'll notice that we touch on every type of story a student could write in the upper-level classes. Each upper-level student earns a role of editor, manager, or executive, and each job description is unique (and often customized to suit the strengths of the person in the role). Students can also work with me to develop their own roles and corresponding job descriptions based on their unique skills and interests. What follows in this column, then, is just a broad overview of some of the types of things that would be happening in this class during these production cycles. But this is inherently unpredictable, subject to change, and diverse.
1	First-Week Supplement and Issue #1	Summer + 30	• Brainstorming, development, and production of the first-week supplement • Incoming second- and third-year staff members will spend the summer writing stories for our website, taking pictures for our social media accounts, and selling advertisements / subscriptions. Third-year executive students will be creating the content for the First-Week Supplement. • During the summer, students will be responsible for coming into the lab for a pre-established number of Open Lab hours. • Second- and third-year students will start the process of brainstorming for the first full issue during the first week of school. • Third-year executives will determine the content of the issue based on the brainstormed ideas, looking for some sort of thematic connection to link several of the stories. • Second-year students will select their top choices for their story assignments. • Third-year executives will assign stories to second-year editors and second- / third-year managers based on their interests and skills. • During the production cycle, editors will be identifying sources, conducting interviews, drafting their stories, taking pictures, and designing their pages. • 3rd-year executives will be assisting second-year editors based on their unique job titles, in addition

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			to carrying out their unique duties tied to their roles. • Managers will be podcasting, broadcasting, handling social media, forecasting / storm chasing, cartooning, etc. • We will go to the annual Illinois Journalism Education Association (IJEA) fall workshop and competition, held at either the University of Illinois or Illinois State University. • Each student will contribute something of their choice to our website during the cycle. • The Design Executive, Photography Executive, Copy Editing Executive, and Editor-in-Chief of Print will meet with each second-year editor at three different checkpoints during the cycle for student-to-student conferences. • I will meet with each student, regardless of level, for mid-cycle and end-of-cycle conferences (with mid-cycle conferences leading to formative grades and end-of-cycle conferences leading to summative scores). • The Sports and Activities Executive will conference with all sports and activity writers at those same checkpoints. • The Podcasting Manager and Broadcasting Manager will conference with any podcasters and broadcasters at those same checkpoints. • We will determine our book for the semester. It's up to the staff if we want to read one book as a whole staff or if we are going to read different books independently or in small groups.
2	Issue #2	30	• We will repeat the process described from Issue #1. • This time, students will receive a new type of story to write. • They will continue to create content for the website (with at least one contribution per cycle). • Students will continue reading their first semester book.
3	Winter Supplement and Issue #3	Winter Break + 30	• We will repeat the process described from Issue #1. • At the same time that we are creating a third full issue, the third-year executives will also create our next 8-page supplement. • We will submit our first three issues, along with several other individual entries, to the Northern Illinois Scholastic Press Association (NISPA) for their annual contest. • We will start to put together our contest

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			submissions, as most journalism competitions begin in February and last throughout the spring. • Students will create and share their summative presentations in relation to their first semester book.
4	Issue #4	Spring Break + 30	• We will repeat the process described from Issue #1. • We will determine our book for second semester. It's up to the staff if we want to read one book as a whole staff or if we are going to read different books independently or in small groups. • We will hold tryouts for our Sectional roster and then make final roster determinations. • We will hold practice days for Sectionals. • We will attend the annual Northern Illinois Scholastic Press Association (NISPA) workshop and competition. • We will submit our contest entries to the Illinois Journalism Education Association (IJEA), Quill & Scroll, and Illinois Women's Press Association (IWPA).
5	Senior Supplement and Issue #5	30 + Summer	• We will repeat the process described from Issue #1. • At the same time that we are creating a fifth full issue, the third-year executives will also create our 8-page Senior Supplement. • Our Sectional roster will compete in the annual IHSA Sectional competition. • Those who qualify from Sectionals will compete in Bloomington at the annual IHSA State finals. • Second-year students will apply for third-year positions. • Third-year students will interview second-year students based on the contents of their applications. • Third-year students will finalize staffing decisions for the following year after the application and interview process, then present those decisions to the adviser for approval. • Outgoing third-year students will train the second-year students inheriting their positions. • Incoming third-year students will begin making plans for the summer schedule, First-Week Supplement, and next year in general. • Incoming third-year students will read the applications of incoming second-year students and then interview each of them. • Incoming third-year students will determine staff roles for incoming second-year students, then

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			present those positions to the adviser for approval. • Students will create and share their summative presentations in relation to their first semester book. • We will award and celebrate our graduating students while continuing to train and prepare the students who will fill their roles.

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Journalism 2: Studies and Publications

Production Cycle	Unit Title	Estimated days	Topics Covered: Every topic that is covered in either upper-level course is one that the students started to learn during Journalism 1. If you look at the Journalism 1 scope and sequence, you'll notice that we touch on every type of story a student could write in the upper-level classes. Each upper-level student earns a role of editor, manager, or executive, and each job description is unique (and often customized to suit the strengths of the person in the role). Students can also work with me to develop their own roles and corresponding job descriptions based on their unique skills and interests. What follows in this column, then, is just a broad overview of some of the types of things that would be happening in this class during these production cycles. But this is inherently unpredictable, subject to change, and diverse.
1	First-Week Supplement and Issue #1	Summer + 30	• Brainstorming, development, and production of the first-week supplement • Incoming second- and third-year staff members will spend the summer writing stories for our website, taking pictures for our social media accounts, and selling advertisements / subscriptions. Third-year executive students will be creating the content for the First-Week Supplement. • During the summer, students will be responsible for coming into the lab for a pre-established number of Open Lab hours. • Second- and third-year students will start the process of brainstorming for the first full issue during the first week of school. • Third-year executives will determine the content of the issue based on the brainstormed ideas,

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			looking for some sort of thematic connection to link several of the stories. • Second-year students will select their top choices for their story assignments. • Third-year executives will assign stories to second-year editors and second- / third-year managers based on their interests and skills. • During the production cycle, editors will be identifying sources, conducting interviews, drafting their stories, taking pictures, and designing their pages. • 3rd-year executives will be assisting second-year editors based on their unique job titles, in addition to carrying out their unique duties tied to their roles. • Managers will be podcasting, broadcasting, handling social media, forecasting / storm chasing, cartooning, etc. • We will go to the annual Illinois Journalism Education Association (IJEA) fall workshop and competition, held at either the University of Illinois or Illinois State University. • Each student will contribute something of their choice to our website during the cycle. • The Design Executive, Photography Executive, Copy Editing Executive, and Editor-in-Chief of Print will meet with each second-year editor at three different checkpoints during the cycle for student-to-student conferences. • I will meet with each student, regardless of level, for mid-cycle and end-of-cycle conferences (with mid-cycle conferences leading to formative grades and end-of-cycle conferences leading to summative scores). • The Sports and Activities Executive will conference with all sports and activity writers at those same checkpoints. • The Podcasting Manager and Broadcasting Manager will conference with any podcasters and broadcasters at those same checkpoints. • We will determine our book for the semester. It's up to the staff if we want to read one book as a whole staff or if we are going to read different books independently or in small groups.
2	Issue #2	30	• We will repeat the process described from Issue #1. • This time, students will receive a new type of story to write. • They will continue to create content for the

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			website (with at least one contribution per cycle). • Students will continue reading their first semester book.
3	Winter Supplement and Issue #3	Winter Break + 30	• We will repeat the process described from Issue #1. • At the same time that we are creating a third full issue, the third-year executives will also create our next 8-page supplement. • We will submit our first three issues, along with several other individual entries, to the Northern Illinois Scholastic Press Association (NISPA) for their annual contest. • We will start to put together our contest submissions, as most journalism competitions begin in February and last throughout the spring. • Students will create and share their summative presentations in relation to their first semester book.
4	Issue #4	Spring Break + 30	• We will repeat the process described from Issue #1. • We will determine our book for second semester. It's up to the staff if we want to read one book as a whole staff or if we are going to read different books independently or in small groups. • We will hold tryouts for our Sectional roster and then make final roster determinations. • We will hold practice days for Sectionals. • We will attend the annual Northern Illinois Scholastic Press Association (NISPA) workshop and competition. • We will submit our contest entries to the Illinois Journalism Education Association (IJEA), Quill & Scroll, and Illinois Women's Press Association (IWPA).
5	Senior Supplement and Issue #5	30 + Summer	• We will repeat the process described from Issue #1. • At the same time that we are creating a fifth full issue, the third-year executives will also create our 8-page Senior Supplement. • Our Sectional roster will compete in the annual IHSA Sectional competition. • Those who qualify from Sectionals will compete in Bloomington at the annual IHSA State finals. • Second-year students will apply for third-year positions. • Third-year students will interview second-year students based on the contents of their applications.

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			• Third-year students will finalize staffing decisions for the following year after the application and interview process, then present those decisions to the adviser for approval. • Outgoing third-year students will train the second-year students inheriting their positions. • Incoming third-year students will begin making plans for the summer schedule, First-Week Supplement, and next year in general. • Incoming third-year students will read the applications of incoming second-year students and then interview each of them. • Incoming third-year students will determine staff roles for incoming second-year students, then present those positions to the adviser for approval. • Students will create and share their summative presentations in relation to their first semester book. • We will award and celebrate our graduating students while continuing to train and prepare the students who will fill their roles.

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Creative Writing 1			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Word Choice	8 (class days)	• Word choice / vocabulary builder • Journaling • Building ideas • Descriptive setting writing
2	Character	14	• Creating characters • Point of view • Dialogue • Create a superhero writing
3	Story structure	10 (for initial instruction and 1st draft)	• Story structure • Openings • Freytag's Pyramid • Multiple drafts - blend into next units before the final summative story is submitted at the end of the semester
4	Poetry	8	• Poetry • Guidance in structure and content • Rhythm and rhyme

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5	Children's story	10	• Writing for a specific audience • Examples • Create own children's story • Summative version is due at the end of the semester
6	Script (stage)	6	• Stage and setting writing for a script • Terminology • Monologue/soliloquy
	Final Summatives	10	• Finalized short story • Finalized children's story • Finalized descriptive writing • Finalized script

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Creative Writing 2			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Intro	5 (class days)	• Journaling • Getting to know you
2	Personal Narrative	15	• Writer's profile • How to say nothing in 500 words • Elements of a memoir • Personal narrative writing • Grammar (syntax) • Openings • Choice writing
3	Genre Study Project	(This unit is worked on throughout the semester)	• Research genre elements • Analyze different genres through children's books • Notes on dialogue in story and script format • Poetry review notes • Setting practice • Word choice practice • Character sketch • Sentence opening variations • Rough drafts are due at various times throughout the semester • Choice writing • Summative short story, one-act play, or poetry anthology is due at the end of the semester.
4	Research	8	• Historical fiction research

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			• CRAAP criteria • Reference page • Annotated bibliography
5	Characterization	10	• More work on dialogue • Inciting incident • Character sketch • Choice writing
6	Final portfolio	10	• Final portfolio includes: Finalized genre study project, Historical fiction annotated bibliography, personal narrative, and reflection writing

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AP Language and Composition			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	The Rhetorical Situation	12 Days	SPACE CAT Ethos, pathos, and logos Intended audience Invented and situated ethos Tone Mood Author's purpose
2	Claims and Evidence	7 Days	• Identifying claims and evidence • Types of evidence • Logical fallacies
3	Rhetorical Analysis and Line of Reasoning	28 Days	• Rhetorical style (diction, juxtaposition, imagery, etc) • Developing commentary • Developing a line of reasoning • Methods of development • Thesis statements • Integrating evidence • Horizontal and vertical transitions
4	Intro to Argument	30 Days	• REHUGO • Claims • Counterclaims • Developing argumentative commentary
5	Intro to Synthesis	27 Days	• Pairing evidence • Qualifying arguments • Developing synthesis outlines

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			• Scanning sources

6	Refining Rhetorical Analysis	25 Days	• Refining the skills from S1
			  ○ Analyzing LOR as it relates to the author's purpose.
			  ○ Analyzing claims and evidence as it relates to the author's purpose.
			  ○ Analyzing style as it relates to the author's purpose.

7	Refining the Argumentative Writing		• Refining skills from S1.

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AP Literature and Composition			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Intro to AP Lit/Short Fiction 1	(5 weeks)	• Close reading skills • Elements of Style: resources of language/narrative techniques • AP Exam intro information and practices • Analyzing characterization • Developing sophistication in writing
2	Poetry 1	(5 weeks)	• Elements of style/poetry devices • Supporting and developing a thesis statement • Tone
3	Longer Fiction 1 - Cry, The Beloved Country (switching to Frankenstein next year)	(7 weeks)	• Theme analysis • Elements of style • Supporting and developing a thesis statement • Sophistication in writing • Integrating textual evidence
4	Drama (Hamlet)	(7 weeks)	• Theme analysis • Character analysis • Understanding and analyzing Shakespearean language • Elements of style
5	Shorter Fiction 2	(5 weeks)	• Tone/Satire/Humor • AP prompt practice • Line of reasoning • Sophistication in writing • Supporting and developing a thesis

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6	Poetry 2	(5 weeks)	• Close reading analysis • Tone analysis • Compare/contrast

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Mathematics - Class Scope and Sequences

Requirements and Classes: **Graduation requirements and classes: 3 Credits Required to Graduate** • **1 must be Algebra 1** • **1 must be Geometry**			
Algebra 1	Geometry	Transitions to Algebra 2	Algebra 2
Algebra 1 Resource	Geometry Resource		Algebra 2 Enhanced
	Geometry Enhanced		

Electives: Can be taken concurrently with required science classes depending on the grade level		
Statistics	Intro to STEM	Pre-Calculus

Advanced Placement Options	
AP Calculus AB	AP Statistics
AP Calculus BC	Qualitative Literacy/Dual Credit Mathematics

Class Outcomes/Unit titles

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Algebra 1			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Solving Equations	8-10	• Students can solve linear equations with one variable using the properties of equality. • Students can solve linear equations with one variable using the properties of equality and determine the number of solutions. • Students can rearrange a formula or literal equation by isolating a specific variable.
2	Linear Functions	10-12	• Students can graph and write linear equations in slope-intercept form. • Students can graph and write linear equations in point-slope form. • Students can graph and write linear equations in standard form. • Students can write and identify parallel and perpendicular lines.
3	Systems of Equations	8-10	• Students can solve a system of equations by graphing. • Students can solve a system of equations using substitution. • Students can solve a system of equations using elimination.
4	Linear Functions	10-12	• Students can determine if relations are functions, if they are one-to-one, and determine reasonable domains. • Students can write, evaluate, and graph linear functions. • Students can describe and apply the transformations of linear functions. • Students can determine if a sequence is arithmetic, write an explicit formula, and find a specific term.
5	Solving Inequalities	12-14	• Students can solve and graph inequalities and determine the number of solutions. • Students can create and solve compound inequalities. • Students solve and graph absolute value equations and inequalities. • Students can graph linear inequalities in the coordinate plane. • Students can solve a system of linear

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			inequalities by graphing.
6	Absolute Value & Piecewise Functions	8-10	• Students can identify key features and graph an absolute value function. • Students can describe and apply the transformations of absolute value functions. • Students can find values and evaluate piecewise functions.
End of 1st Semester			
7	Polynomials & Factoring	14-16	• Students can apply the properties of exponents. • Students can combine like terms to simplify polynomials. • Students can multiply binomials. • Students can find the greatest common factor of polynomials. • Students can factor a quadratic trinomial. • Students can factor a quadratic trinomial when a is not 1.
8	Solving Quadratic Equations	14-16	• Students can solve quadratic equations by factoring. • Students can rewrite radical expressions. • Students can solve quadratic equations by finding square roots. • Students can complete the square. • Students can use the quadratic formula & the discriminant.
9	Solving Radicals	8-10	• Students will be able to perform operations on square roots. • Students will be able to solve square root equations..
10	Graphing Quadratic & Radical Functions	12-14	• Students can identify key features of quadratic functions. • Students can graph quadratic functions in vertex form. • Students can graph quadratic functions in standard form. • Students can model with quadratic functions. • Students can determine which model best fits a set of data. • Students will be able to graph square root functions
11	Statistics	10-12	• Students can analyze data displays. • Students can compare data sets.

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			• Students can interpret the shapes of data displays. • Students can calculate and interpret standard deviation. • Students can create and interpret two-way frequency tables.
12	Exponential Functions	8-10	• Students can graph and write exponential functions. • Students can write exponential growth & decay functions. • Students can write recursive and explicit formulas for geometric sequences.

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Geometry			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1A	Foundations of Geometry	~14	• LT 0-1 Students can identify and name geometric items. • LT 0-2 Students can identify, name, and classify angles. • LT 1-1 Students can use properties of segments and angles to find their measures. • LT 1-2 Students can use a straightedge and compass to construct basic figures. • LT 1-3 Students can use the midpoint and distance formulas to solve problems.
1B	Foundations of Geo. / Logic and Reasoning	~11	• LT 1-4 Students can use Inductive Reasoning • LT 1-5 Students can identify Conditional Statements and determine truth value • LT 1-6 Students can apply Deductive Reasoning to draw conclusions • LT 1-7 Students can use reasoning to begin Writing Proofs
2	Parallel & Perpendicular Lines	~13	• LT 2-1 Students can use Parallel Lines to find measures of angles. • LT 2-2 Students can Prove Lines Parallel using angle relationships. • LT 2-3 Students can solve problems about parallel lines and Triangle Angle Sums. • LT 2-4 Students can use slope to solve problems about Parallel and Perpendicular Lines.

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3	Transformations	~13	• LT 3-1 Students can reflect images. • LT 3-2 Students can translate images. • LT 3-3 Students can rotate images • LT 3-4 Students can classify a composition of rigid motions • LT 3-5 Students can describe point, line, and rotational symmetry.
4	Triangle Congruence	~13	• LT 4-1 Students can determine congruent figures • LT 4-2 Students can solve problems involving isosceles and equilateral triangles • LT 4-3 Students can prove and apply SSS and SAS congruence • LT 4-4 Students can prove and apply ASA and AAS congruence • LT 4-5 Students can prove and use the HL congruence
5	Relationships to Triangles	~10	• LT 5-1 Students can use Perpendicular and Angle bisectors in a triangle. • LT 5-2 Students can use bisectors in and points of concurrency in triangles. • LT 5-3 Students can use Medians & Altitudes and point of concurrency in triangles. • LT 5-4 Students can use inequalities in one triangle. • LT 5-5 Students can use inequalities in two triangles.
End of 1st Semester			
6	Quadrilaterals & Other Polygons	~13	• LT 6-1 Students can use the Polygon Angle-Sum Theorem. • LT 6-2 Students can apply the properties of kites & trapezoids. • LT 6-3/4 Students can apply the properties of parallelograms. • LT 6-5/6 Students can apply the properties of special parallelograms.
7	Similarity	~14	• LT 7-1 Students can dilate figures. • LT 7-2 Students can determine if figures are similar. • LT 7-3 Students can prove triangles are similar. • LT 7-4 Students can use similarity of right triangles to solve problems. • LT 7-5 Students can use side and angle theorems to solve problems.

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8	Right Triangles & Trigonometry	~14	• LT 8-1 Students can prove the Pythagorean Theorem using similarity and establish the relationships in special right triangles. • LT 8-2 Students can use trigonometric ratios to find lengths and angle measures of right triangles. • LT 8-3/ 8-4 Students can use the Law of Sines and the Law of Cosines to solve problems. • LT 8-5 Students can distinguish between angles of elevation and depression when solving problems.
9-10	Coordinate Geometry/Circles	~17	• LT 9-3 Students can use the equation and graphs of circles to solve problems. • LT 10-1 Students can find lengths of arcs & area of sectors. • LT 10-2 Students can solve problems with tangent lines. • LT 10-3 Students can find lengths & measures involving chords, arcs, & angle measures. • LT 10-4 Students can find angle & arc measures involving chords & tangents. • LT 10-5 Students can find angles & lengths involving secants & tangents.
11	Two & Three Dimensional Models	~14	• LT 11-1 Students can identify and describe properties of a polyhedron. • LT 11-2 Students can find the volume of prisms and cylinders. • LT 11-3 Students can find the volume of pyramids and cones. • LT 11-4 Students can find the volume of spheres and composite figures.
12	Probability	~12	• LT 12-1 Students can use set theory and Venn Diagrams. • LT 12-2 Students can determine outcomes to find the theoretical or experimental probability. • LT 12-3 Students can find geometric probabilities with length, area, and volume. • LT 12-4 Students can determine compound probability. • LT 12-5 Students can determine conditional probability. • LT12-6 Students can use two-way tables to calculate relative frequencies.

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Geometry Enhanced			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	The Fundamentals of Geometry	10	• Ruler and Segment Addition Postulates. • Protractor and Angle Addition postulates. • Congruent segments and congruent angles. • Construct copies of segments and angles, perpendicular bisectors of segments, and bisectors of angles. • Construction to solve problems. • I can use the midpoint formula to find the midpoint of a segment drawn on the coordinate plane. • I can use the distance formula to find the length of the segment drawn on the coordinate plane. • I can use inductive reasoning to identify patterns and make predictions based on data. • I can use inductive reasoning to provide evidence that conjectures are true or provide counterexamples to disprove them. • I can write conditional and biconditional statements. • I can find the contrapositive, converse, and inverse of a conditional statement. • I can use deductive reasoning to draw a valid conclusion based on a set of given facts. • I can use deductive reasoning to prove geometric theorems about lines and angles. • I can use deductive reasoning to prove geometric theorems about lines and angles.
2	Parallel & Perpendicular Lines	10	• I can define parallel lines using the undefined terms *point* and *line*. • I can prove theorems about lines and angles. • I can use theorems to find the measures of angles formed by parallel lines and a transversal. • I can prove that two lines cut by a transversal are parallel using the converses of parallel line angle relationship theorems. • I can use properties of parallel lines and transversals to solve applications and

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			mathematical problems. • I can write and use flow proofs. • I can prove that two lines cut by a transversal are parallel using the converses of parallel line angle relationship theorems. • I can use properties of parallel lines and transversals to solve applications and mathematical problems. • I can write and use flow proofs. • I can show that two lines in the coordinate plane are parallel by comparing their slopes, and solve problems. • I can show that two lines in the coordinate plane are perpendicular by comparing their slopes, and use that to solve problems
3	Transformations	10	• I can find a reflected image and write a rule for a reflection. • I can define a reflection as a transformation across a line of reflection with given properties and perform reflections on and off a coordinate grid. • I can translate a figure and write a rule for a translation. • I can find the image of a figure about a composition of rigid motions. • I can prove that a translation is a composition of two reflections. • I can rotate a figure and write a rule for a rotation. • I can prove that a rotation can be written as the composition of two reflections. • I can specify a sequence of transformations that will carry a given figure onto another. • I can use geometric descriptions of rigid motions to transform figures. • I can describe the rotations and/or reflections that carry a polygon onto itself. • I can predict the effect of a given rigid motion on a figure. • I can identify types of symmetry in a figure.
4	Triangle Congruence	12	• I can relate congruence to rigid motions. • I can demonstrate that two figures are congruent by using one or more rigid motions to map one onto the other. • I can use properties and theorems about isosceles and equilateral triangles to solve problems. • I can identify congruent triangles using properties of isosceles and equilateral

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			triangles. • I can prove triangle congruence by SAS and SSS congruence criteria and use triangle congruence to solve problems. • I can understand that corresponding parts of congruent triangles are congruent and use CPCTC • I can prove that two triangles are congruent using ASA and AAS criteria and apply ASA to solving problems. • I can prove that two polygons, all of whose corresponding sides and angles are congruent, are congruent. • I can prove the Hypotenuse-Leg Theorem. • I can use congruence criteria for triangles to solve problems and to prove relationships in geometric figures. • I can apply congruence criteria to increasingly intricate problems involving overlapping triangles and multiple triangles. • I can prove triangles are congruent by identifying corresponding parts and applying the correct theorems.
5	Relationships to Triangles	10	• I can prove the Perpendicular Bisector Theorem, the Angle Bisector Theorem, and their converses. • I can use the Perpendicular Bisector Theorem to solve problems. • I can use the Angle Bisector Theorem to solve problems. • I can prove that the point of concurrency of the perpendicular bisectors of a triangle, called the circumcenter, is equidistant from the vertices. • I can prove that the point of concurrency of the angle bisectors of a triangle, called the incenter, is equidistant from the sides. • I can identify special segments in triangles and understand theorems about them. • I can find and use the point of concurrency of the medians of a triangle to solve problems and prove relationships in triangles. • I can find the point of concurrency of the altitudes of a triangle. • I can prove that the side lengths of a triangle are related to the angle measures of the triangle. • I can use the angle measures of a triangle

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			to compare the side lengths of the triangle. • I can use the Triangle Inequality Theorem to determine if three given side lengths will form a triangle and to find a range of possible side lengths for a third side given two side lengths. • I can prove the Hinge Theorem and use the Hinge Theorem to compare side lengths. • I can prove the Converse of the Hinge Theorem and use the Converse of the Hinge Theorem to compare angle measures.
6	Quadrilaterals & Other Polygons	10	• I can show that the sum of the exterior angles of a polygon is 360 degrees and use that to solve problems. • I can show that the sum of the interior angles of a polygon is the product of 180 degrees and two less than the number of sides, and use that to solve problems. • I can use properties of the diagonals of a kite to solve problems and prove relationships. • I can use properties of isosceles trapezoids to solve problems and prove relationships. • I can use the relationship between the lengths of the bases and midsegment of a trapezoid to solve problems. • I can show that the consecutive angles of a parallelogram are supplementary and opposite angles are congruent. • I can show that opposite sides of a parallelogram are congruent. • I can show that diagonals of a parallelogram bisect each other. • I can demonstrate that a quadrilateral is a parallelogram based on its sides and diagonals. • I can demonstrate that a quadrilateral is a parallelogram based on its angles. • I can prove that the diagonals of rhombuses are perpendicular bisectors of each other and angle bisectors of the angles of the rhombus. • I can prove that the diagonals of a rectangle are congruent. • I can use properties of rhombuses, rectangles, and squares to solve problems. • I can identify rhombuses, rectangles, and squares by the characteristics of diagonals of parallelograms.

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7	Similarity	10	• I can dilate figures on and off the coordinate plane. • I can understand how distances and lengths in a dilation are related to the scale factor and center of dilation. • I can understand that two figures are similar if there is a similarity transformation that maps one figure to the other. • I can identify a combination of rigid motions and dilation that maps one figure to a similar figure. • I can identify the coordinates of an image under a similarity transformation. • I can use dilations and rigid motions to prove triangles are similar. • I can use AA~, SSS~, and SAS~ to prove triangles are similar. • I can use the similarity of right triangles to solve problems. • I can use length relationships of the sides of right triangles and an altitude drawn to the hypotenuse to solve problems. • I can use the Side-Splitter Theorem and the Triangle Midsegment Theorem to find lengths of sides and segments of triangles. • I can use the Triangle-Angle-Bisector Theorem to find lengths of sides and segments of triangles.
8	Rt. Triangles & Trigonometry	12	• I can prove the Pythagorean Theorem using similar right triangles. • I can understand and apply the relationships between side lengths in 45-45-90 and 30-60-90 triangles. • I can Define and calculate sine, cosine, and tangent ratios. • I can use trigonometric ratios to solve problems. • I can understand why the Law of Sines applies to any triangle. • I can use the Law of Sines to solve problems. • I can develop an understanding of the Law of Cosines. • I can use the law of cosines to solve problems. • I can distinguish between angles of elevation and depression. • I can use trigonometric ratios and the Law of Sines and the Law of Cosines to solve

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			problems.
UC	Unit Circle	7	• I can draw & express an angle in standard position. • I can identify coterminal angles. • I can identify the degree or radian angle measures on the unit circle given a reference angle. • I can give a reference angle in degrees or radians given the angle measure. • I can identify the coordinates on the unit circle. • I can use these coordinates to answer questions about Sine, Cosine, and Tangent of common angle measures. • I can convert radian angle measures to degree angle measures and vice versa.
9	Coordinate Geometry	10	• I can use coordinate geometry to classify triangles and quadrilaterals on the coordinate plane. • I can solve problems involving triangles and polygons on the coordinate plane. • I can plan a method of proof using coordinate geometry. • I can prove theorems using algebra and the coordinate plane. • I can write the equation for a circle given the graph of the circle or given the center and radius of the circle. • I can graph a circle from its equation. • I can explain the relationship between a focus and directrix and the corresponding parabola. • I can write equations for parabolas given the focus and directrix.
10	Circles	10	• I can calculate the length of an arc when the central angle is given in degrees or radians. • I can calculate the area of sectors and segments of circles. • I can identify lines that are tangent to a circle using angle measures and segment lengths. • I can solve problems involving tangent lines. • I can prove and apply relationships between chords, arcs, and central angles. • I can find lengths of chords given the distance from the center of the circle and use this information to solve problems.

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			• I can identify and apply relationships between the measures of inscribed angles, arcs, and central angles. • I can identify and apply the relationships between an angle formed by a chord and a tangent to its intercepted arc. • I can recognize and apply angle relationships formed by secants and tangents intersecting inside and outside of a circle. • I can recognize and apply segment length relationships formed by secants and tangents intersecting inside and outside a circle.
11	Two & Three Dim. Models	14	• I can use Euler's Formula to calculate the number of vertices, faces, and edges in polyhedrons. • I can describe cross-sections of polyhedrons. • I can describe rotations of polygons about an axis. • I can understand how the volume formulas for prisms and cylinders apply to oblique prisms and cylinders. • I can model three-dimensional figures as cylinders and prisms to solve problems. • I can understand how the volume formulas for pyramids and cones apply to oblique pyramids and cones. • I can model three-dimensional figures as pyramids and cones to solve problems. • I can use Cavalieri's Principle to show how the volume of a hemisphere is related to the volume of a cone and a cylinder. • I can calculate volumes and surface areas of spheres and composite figures.
12	Probability	12	• I can explain independence of events in everyday language and everyday situations. • I can determine the probability of the union of two events (A and B) and the intersection of two independent events (A and B) • I can understand the conditional probability of A given B as the fraction of outcomes in B that also belong to A. • I can interpret the • independence of events in terms of conditional probability. • I can use a two-way frequency table to

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			decide if events are independent and to approximate conditional probabilities. • I can calculate the number of permutations and combinations in mathematical and real-world contexts. • I can use permutations and combinations to compute probabilities of compound events and solve problems. • I can develop probability distribution based on theoretical probabilities or empirical data. • I can graph probability distributions. • I can calculate probability in binomial experiments. • I can calculate the expected value in situations involving chance. • I can weigh the possible outcomes of a decision by comparing expected values and finding expected payoffs. • I can analyze decisions and evaluate fairness using probability concepts.
Spheres	Distances on the Sphere	8	• I can distinguish between Latitude and Longitude. • I can recognize that these represent places on Earth as a global location with regards to the Prime Meridian, the International Date Line, the Equator, and the poles. • I can add and subtract numbers using a sexagesimal base. • I can convert a sexagesimal number to decimal and vice-versa. • I can find the distance between two cities that are on the same line of Latitude. • I can find distances from cities to the North or South Pole. • I can find the great circle distance using the Spherical Law of Cosines between cities in the same North/South Hemisphere and the same East/West Hemisphere. • I can find the great circle distance using the Spherical Law of Cosines between cities in different hemispheres.

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Transitions to Algebra 2			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**

1	Linear Functions	12-14	• Topic 1: Using Distribution for Arithmetic
			  ○ Addition, Subtraction, Multiplication using distribution
			  ○ Determining percentages using distribution
			• Topic 2: Transformations of Functions
			  ○ Graphing linear, absolute value, quadratic, and square root functions using transformations of the parent function
			• Topic 3: Features of Functions
			  ○ Domain and range of functions
			  ○ Interval notation
			• Topic 4: Function Notation and Composition
			  ○ Function Notation
			  ○ Performing function composition with numbers.

2	Quadratic Functions	18-20	• Topic 1: Operations on Complex Numbers
			  ○ Multiply, divide, add, subtract with complex numbers
			  ○ Using composition with complex numbers
			• Topic 2: Solving Quadratics
			  ○ Solve using square roots
			  ○ Solve using factoring
			  ○ Solve using the quadratic formula
			• Topic 3: Features of Quadratics
			  ○ Finding domain and range
			  ○ Finding the x- and y- intercepts of a quadratic
			• Topic 4: Quadratic Applications
			  ○ Use the vertex and intercepts to solve quadratic applications

3	Operations & Graphing Polynomials	15-17	• Topic 1: Operations with Polynomials
			  ○ Adding, subtracting, and multiplying polynomials
			• Topic 2: Synthetic Division
			  ○ Using synthetic division to divide polynomials
			• Topic 3: Graphing Polynomials in Factored Form
			  ○ Graphing a polynomial from

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			factored form • Topic 4: Positive/ Negative Intervals of a Graph ○ Listing positive and negative intervals of a graph using interval notation
4	Solving Polynomials	11-13	• Topic 1: Solving Polynomials ○ Solving 3 term polynomials by factoring ○ Solving 4 term polynomials using grouping ○ Solving two term polynomials using square roots ○ Solving a polynomial using synthetic division
5	Systems of Equations & Matrices	9-11	• Topic 1: 2x2 Systems ○ Solving a 2x2 system using substitution and elimination ○ Setting up and solving a 2x2 word problem by hand • Topic 2: 3x3 Systems ○ Solving a 3x3 system by hand using elimination and substitution • Topic 3: Matrices ○ Using a matrix to solve a system of equations ○ Setting up and solving a 3x3 word problem using matrices
6	Graphing Rationals	11-13	• Topic 1: Graphing Rational Functions ○ Graphing a rational function if given all the information (Holes, Vertical Asymptotes, X-Intercepts, Y-Intercept, End Behavior Asymptote) ○ Finding all the information of a rational function ■ Holes, Vertical Asymptotes, X-Intercepts, Y-Intercept, End Behavior Asymptote • Topic 2: U-Substitution ○ Solving rational equations using u-substitution
7	Solving Rational Equations	10-12	• Topic 1: Multiplying and Dividing Rationals ○ Multiplying rational expressions and simplifying ○ Dividing rational expressions and simplifying

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			• Topic 2: Finding Lowest Common Denominator (LCD)
			  ○ Finding the LCD of rational expressions / equations
			• Topic 3: Solving Rationals Using LCD
			  ○ Solving rational equations by finding LCD and multiplying each term by LCD

8	Logarithms & Exponentials	11-13	• Topic 1: Solving Logarithms and Exponentials
			  ○ Solving an exponential by changing the base
			  ○ Solving an exponential or log
			  ○ Solving a natural log
			• Topic 2: Word Problems
			  ○ Solving word problems with exponential growth or decay
			  ○ Solving word problems that are being compounded n times or continuously

9	Trigonometry - Operations and Triangles	15-17	• Topic 1: Trigonometric Ratios and Solving Right Triangles
			  ○ Finding the six trigonometric ratios of a right triangle
			  ■ *Sin, cos, tan, csc, sec, cot*
			  ○ Using the inverse trig functions to find the angles of a triangle
			  ○ Solving word problems with angles of elevation and depression
			  ○ Finding all six trig ratios if given just one of the ratios
			• Topic 2 : Law of Sines and Cosines
			  ○ Solving non-right triangles using the Law of Sines
			  ○ Solving non-right triangles using the Law of Cosines

10	Solving Trigonometric Equations	11-14	• Topic 1: Reference Angles and Exact Values
			  ○ Finding and drawing angles and coterminal angles in radians and degrees.
			  ○ Finding and drawing reference angles in radians and degrees
			  ○ Determining the exact value of U9 trig functions using the Unit Circle
			• Topic 2: Solving Trigonometric Equations
			  ○ Solving trigonometric equations for $0 \leq \Theta \leq 2\pi$
			• Topic 3: U-Substitution

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			○ Using U-Substitution to solve trigonometric equations
11	Graphing Trigonometric Equations	8-12	• Topic 1: Reference Angles and Exact Values ○ Graphing the parent function of sine, cosine, tangent ○ Applying and graphing vertical shifts and amplitude changes to the graphs of sine, cosine, tangent ○ Solving word problems with angles of elevation and depression
Floating 2	Sequences & Series		•

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Algebra 2			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	**Unit 1: Linear Functions**	~15	• LT 1-1 Students can solve Linear Equations and Inequalities • LT 1-2 Students can Graph Linear Equations and Inequalities • LT 1-3 Students can graph Inequalities and interpret results • LT 1-4 Students can use Function Notation and perform operations and compositions.
2	**Unit 2A: Graphing Quadratics**	~15	• LT 2-1 Graphing Quadratic Function from Vertex Form • LT 2-2 Graphing Quadratic Function from Standard Form • LT 2-3 Graphing Quadratic Function from Factored Form • Modeling Quadratics using the Graphs
2	**2B: Solving Quadratics**	~15	• LT 2-3 Solving Quadratics using Factoring • LT 2-4 Simplifying and Operations with Complex Numbers • LT 2-5 Solving Quadratic using Complete the Square • LT 2-6 Solving Quadratics using Quadratic Formula • Modeling Quadratics using Equations
3	**Unit 3A: Graph and Operations**	~10	• LT 3-1 Operations with Polynomials • LT 3-2 Division with Polynomials

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			• LT 3-3 Graphing Polynomials & Writing Equations
3	**Unit 3B: Solve and Applications**	~10	• LT 3-4 Solving Polynomials • LT 3-5 Factoring Polynomials • LT 3-6 Modeling with Polynomials
4	**Unit 4: Systems of Equations & Systems**	~15	• LT 4-1 2x2 System of Equations • LT 4-2 3x3 System of Equations • LT 4-3 Matrices • LT 4-4 Modeling with Systems of Equations
End of 1st Semester			
5	**Unit 5A: Graphing Rational Functions**	~10	• LT 5-1 Reciprocal Function Graphing • LT 5-2 Rational Function Graphing
5	**Unit 5B: Operations & Equations with Rationals**	~10	• LT 5-3 Operations with Rationals • LT 5-4 Rational Equations
6	**Unit 6A – Exponential & Logarithmic Graphing & Applications**	~10	• LT 6-1 Graphing of Exponentials & Logarithms • LT 6-2 Applications of Exponentials & Logarithms
6	**Unit 6B – Exponential & Logarithmic Operations & Equations**	~10	• LT 6-3 Operations with Exponential & Logarithmic Expressions • LT 6-4 Solving Exponential & Logarithmic Equations
7	**Unit 7: Trigonometry & the Unit Circle**	~20	• LT 7-1 Trigonometric Ratios • LT 7-2 The Unit Circle Angles & Coordinates • LT 7-3 Exact Values of Trigonometric Ratios • LT 7-4 Solving Trigonometric Equations
8	**Unit 8: Graphs of Trigonometric Functions**	~12	• LT 8-1: The Sine Graph • LT 8-2: The Cosine Graph • LT 8-3: The Tangent Graph
9	**Unit 9: Sequences & Series**	~12	• LT 9-1: Arithmetic & Geometric Sequences • LT 9-2: Arithmetic & Geometric Series • LT 9-3: Applications with Sequences & Series

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Algebra 2 Enhanced

Unit #	Unit Title	Estimated days	Topics Covered:
1	Unit 1 Linear Functions and Systems	10 -12	• Identify key features of a graph of a function, including the intercepts, positive

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	1A: Linear Functions and Transformation of Functions 1B: Solve Linear Systems using Matrices		and negative intervals, and areas where the function is increasing or decreasing. • Solve real-world problems and interpret them in terms of their context. • Write the domain and range of functions using set-builder and interval notations. • Graph a transformed function by identifying the effect on the graph of replacing f(x) by f(x) + k, kf(x), f(kx), and f (x + k) for specific values of k. • Write an equation of a transformed function. • Graph piecewise functions using linear, quadratic and absolute value functions. • Relate the domain of a function to its graph and the real-world situation it describes. • Identify the common difference in an arithmetic sequence. • Write arithmetic sequences both recursively and with an explicit formula. • Construct arithmetic sequences, given a graph, a description of a relationship, or two input-output pairs. • Solve linear and nonlinear systems graphically and algebraically. Students will be introduced to Solve Linear Systems using Augmented Matrix. • Identify regions that satisfy systems of inequalities.
2	Unit 2 Quadratic Functions 2A: Graph in Vertex and Standard form	15	• For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercept; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior. • Graph quadratic function in Vertex form and Standard form as well.

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	2B: Solve and Applications		• Recognize factored form of a quadratic function and they need to convert from Vertex to Standard and to Factored form. • Solve quadratic equations using Factoring Method. • Know there is a complex number i such that i^2 = –1 and every complex number has the form a + bi with a and b as real numbers. • Use the relation i^2 = –1 and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers. • Find the conjugate of a complex number; use conjugates to find moduli and quotients of complex numbers. • Use the method of completing the square to transform any quadratic equation in x into an equation of the vertex from that has the same solutions. Derive the quadratic formula from this form. • Solve quadratic equations by inspection (e.g., for x 2 = 49), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as a ± bi for real numbers a and b. • Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically.
3	Unit 3 Polynomial Functions 3A: Graph and Operations	15	• Sketch a graph of polynomial functions and show the key features of the graph. • Predict the end behavior of polynomial functions by interpreting the leading coefficients and degrees. • Sketch graphs showing key features - intercepts, end behavior and determine domain and range. • Determine whether functions are even or odd from their graphs and algebraic equations. • Identify the effect on the graphs of cubic and quartic functions of replacing f(x) with f(x) + k, kf(x), f(kx), and f(x + k). • Given a graph, determine the equation as it is related to its parent cubic function or quartic function.

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	3B: Solve and Applications		• Add, subtract, and multiply polynomials and understand that polynomials are closed under these operations. • Compare a polynomial function represented algebraically. • Prove polynomial identities and use them to multiply and factor polynomials. • Expand binomials using the Binomial Theorem and coefficients determined by Pascal's Triangle. • Divide polynomial expressions using long division. • Use synthetic division to rewrite rational expressions. • Solve for the zeros of a function by factoring or using synthetic division. • Sketch a graph of a polynomial function using its zeros. • Extend polynomial theorems and identities to find the real and complex solutions of a polynomial equation. • Write polynomial functions using conjugates. • Use mathematical modeling to represent a problem situation and to propose a solution. • Test and verify the appropriateness of their math models. • Explain why the results from their mathematical models might not align exactly with the problem situation.
4	Unit 4 Rational Functions 4A: Graph 4B: Solve and Applications	12-15	• Use inverse variation to write and graph the reciprocal function. • Identify the effect of transformations on the graph of the reciprocal function and define the effects of h and k on the function $f(x) = 1/(x-h)+k$. • Graph rational functions by identifying asymptotes and end behavior. • Rewrite simple rational expressions in different forms using long division • Use the structure of rational expressions to rewrite simple rational expressions in different forms. • Apply previous understanding that rational expressions form a system analogous to the system of rational numbers and use that

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			understanding to multiply or divide and add or subtract rational expressions. • Solve one-variable rational equations. • Identify extraneous solutions to rational equations and give examples of how they arise.
5	Unit 5: Radicals 5A: Graph 5B: Solve and Applications	10-12	• Graph radical functions using transformations • Find domain and range • Find composition of functions and perform all other operations - add, subtract, multiply and divide functions • Verify inverses by using composition of functions • Restrict domain of the function in order for the inverse to be a function • Find exact value of radicals or rational exponents and simplify correctly • Find solutions to radical equations and check for extraneous solutions • Be able to set up application problems and solve correctly
6	Unit 6 Exponential and Logarithmic Functions 6A: Graph and Inverses 6B: Solve and Applications - Interest and Geometric Sequences	12	• Graph exponential functions , find y int, H.A and other points • Graph logarithmic functions, find x int , V.A and other points • Find intercepts • Find domain and range • Solve application problems using compound interest formula and continuous Interest formula • Simplify expressions using properties of exponents • Evaluate logarithms • Change between the forms of exponential and logarithmic form • Condense or expand logarithms using properties of logarithms • Solve equations with the same base • Solve logarithmic equations in the form log = log and log = number • Solve exponential equations using logarithms

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			• Solve application problems using geometric sequences and series
7	Unit 7 Trigonometric Functions 7A: Unit Circle and Applications 7B: Graph and Applications	15	• Understand the radian measure of an angle as the length of the arc on the unit circle subtended by the angle. • Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers, interpreted as radian measures of angles counterclockwise around the unit circle. • Use special triangles to determine geometrically the values of sine, cosine, tangent for π/3 , π/4 and π /6 , and use the unit circle to express the values of sine, cosine, and tangent for x, π + x, and 2π – x in terms of their values for x, where x is any real number. • Graph trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline. • Understand that restricting a trigonometric function to a domain on which it is always increasing or always decreasing allows its inverse to be constructed
8	Unit 8 Analytic Trigonometry 8A: Solve and Applications 8B:Trigonometric Identities: Verify and Intro to the Complex Plane	10 -12 (only if there is time, especially for 8B)	• Define and evaluate inverse trig. functions • Solve trigonometric equations using inverses • Derive the Law of Sine and Law of Cosine • Use the Law of sine and Law of Cosine to find unknown angles and sides of non-right triangles • Verify trigonometric identities using the Unit Circle • Verify the sum and difference formulas for sine, cosine and tangent and use them to solve real-life questions • Represent complex numbers in polar form and convert between polar and rectangular coordinates

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Statistics			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Analyzing Data	21 Days	• I can identify the individuals and variables in a data set, then classify the variables as categorical or quantitative. • I can summarize the distribution of a variable with a frequency table or a relative frequency table. • I can make and interpret bar charts of categorical data. • I can interpret pie charts. • I can Identify what makes some graphs of categorical data deceptive. • I can make and interpret dotplots of quantitative data. • I can Describe the shape of a distribution. • I can compare distributions of quantitative data with dotplots. • I can make stemplots of quantitative data. • I can interpret stemplots. • I can compare distributions of quantitative data with stemplots. • I can make histograms of quantitative data. • I can interpret histograms. • I can compare distributions of quantitative data with histograms. • I can find and interpret the median of a distribution of quantitative data. • I can calculate the mean of a distribution of quantitative data. • I can Compare the mean and median of a distribution, and choose the more appropriate measure of center in a given setting • I can find the range of a distribution of quantitative data. • I can find and interpret the interquartile range. • I can calculate and interpret the standard deviation. • I can use the 1.5 × *IQR* rule to identify outliers. • I can make and interpret boxplots of quantitative data. • I can Compare distributions of quantitative

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			data with boxplots • I can Find and interpret a percentile in a distribution of quantitative data. • I can Estimate percentiles and individual values using a cumulative relative frequency graph. • I can find and interpret a standardized score (z-score) in a distribution of quantitative data.
2	Analyzing Two-Variable Data	17 Days	• I can distinguish between explanatory and response variables for categorical data. • I can make a segmented bar chart to display the relationship between two categorical variables. • I can determine if there is an association between two categorical variables and describe the association if it exists. • I can distinguish between explanatory and response variables for quantitative data. • I can make a scatterplot to display the relationship between two quantitative variables. • I can Describe the direction, form, and strength of a relationship displayed in a scatterplot and identify outliers. • I can estimate the correlation between two quantitative variables from a scatterplot. • I can interpret the correlation. • I can distinguish correlation from causation. • I can calculate the correlation between two quantitative variables. • I can apply the properties of the correlation. • I can Describe how outliers influence the correlation. • I can make predictions using regression lines, keeping in mind the dangers of extrapolation. • I can calculate and interpret a residual. • I can interpret the slope and *y* intercept of a regression line. • I can calculate the equation of the least-squares regression line using technology. • I can calculate the equation of the least-squares regression line using summary statistics. • I can Describe how outliers affect the least-squares regression line.

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			• I can use a residual plot to determine whether a regression model is appropriate. • I can interpret the standard deviation of the residuals. • I can interpret *r*. • I can use technology to calculate quadratic models for curved relationships, then calculate and interpret residuals using the model. • I can Use technology to calculate exponential models for curved relationships, then calculate and interpret residuals using the model. • I can Use residual plots to determine the most appropriate model.
3	Collecting Data	16 Days	• I can distinguish statistical questions from other types of questions. • I can identify the population and sample in a statistical study. • I can distinguish between an observational study and an experiment. • I can describe how convenience sampling can lead to bias. • I can Describe how voluntary response sampling can lead to bias. • I can explain how random sampling can help to avoid bias. • I can Describe how to obtain a simple random sample using slips of paper or technology. • I can explain the concept of sampling variability and the effect of increasing sample size. • I can use simulation to test a claim about a population proportion. • I can use simulation to approximate the margin of error for a sample proportion and interpret the margin of error. • I can use simulation to approximate the margin of error for a sample mean and interpret the margin of error. • I can Explain how undercoverage can lead to bias. • I can explain how nonresponse can lead to bias. • I can explain how other aspects of a sample survey can lead to bias.

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			• I can explain the concept of confounding and how it limits the ability to make cause-and-effect conclusions. • I can explain the purpose of comparison in an experiment. • I can Describe the placebo effect and the purpose of blinding in an experiment. • I can Describe how to randomly assign treatments using slips of paper or technology. • I can explain the purpose of random assignment in an experiment. • I can identify other sources of variability in an experiment and explain the benefits of keeping these variables the same for all experimental units. • I can outline an experiment that uses a completely randomized design. • I can explain the concept of statistical significance in the context of an experiment. • I can use simulation to determine if the difference between two means or two proportions is significant. • I can identify when it is appropriate to use information from a sample to make an inference about a population and when it is appropriate to make an inference about cause and effect. • I can evaluate if a statistical study has been carried out in an ethical manner.
4	Probability	15 Days	• I can interpret probability as a long-run relative frequency. • I can dispel common myths about randomness. • I can use simulation to model chance behavior. • I can give a probability model for a chance process with equally likely outcomes and use it to find the probability of an event. • I can use the complement rule to find probabilities. • I can use the addition rule for mutually exclusive events to find probabilities. • I can use a two-way table to find probabilities. • I can Calculate probabilities with the general addition rule.

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			• I can use a Venn diagram to find probabilities. • I can find and interpret conditional probabilities using two- way tables. • I can use the conditional probability formula to calculate probabilities. • I can determine whether two events are independent. • I can use the general multiplication rule to calculate probabilities. • I can use a tree diagram to model a chance process involving a sequence of outcomes. • I can Calculate conditional probabilities using tree diagrams. • I can use the multiplication rule for independent events to calculate probabilities. • I can Calculate *P*(at least one) using the complement rule and the multiplication rule for independent events. • I can determine if it is appropriate to use the multiplication rule for independent events in a given setting. • I can use the multiplication counting principle to determine the number of ways to complete a process involving several steps. • I can use factorials to count the number of permutations of a group of individuals. • I can compute the number of permutations of *n* individuals taken *k* at a time. • I can compute the number of combinations of *n* individuals taken *k* at a time. • I can use combinations to calculate probabilities. • I can use the multiplication counting principle and combinations to calculate probabilities.
5	Random Variables	16 Days	• I can Verify that the probability distribution of a discrete random variable is valid. • I can Calculate probabilities involving a discrete random variable. • I can classify a random variable as discrete or continuous. • I can make a histogram to display the probability distribution of a discrete random variable and describe its shape. • I can calculate and interpret the mean

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			(expected value) of a discrete random variable. • I can calculate and interpret the standard deviation of a discrete random variable. • I can determine whether or not a given scenario is a binomial setting. • I can Calculate probabilities involving a single value of a binomial random variable. • I can make a histogram to display a binomial distribution and describe its shape. • I can calculate and interpret the mean and standard deviation of a binomial distribution. • I can Find probabilities involving several values of a binomial random variable. • I can use technology to calculate cumulative binomial probabilities. • I can show that the probability distribution of a continuous random variable is valid and use the distribution to calculate probabilities. • I can determine the relative locations of the mean and median of a continuous random variable from the shape of its probability distribution. • I can draw a normal probability distribution with a given mean and standard deviation. • I can use the 68–95–99.7 rule to find approximate probabilities in a normal distribution. • I can Use Table A to find a probability (area) from a *z*- score in the standard normal distribution. • I can Use Table A to find a *z*-score from a probability (area) in the standard normal distribution. • I can calculate the probability that a value falls within a given interval in a normal distribution. • I can find a value corresponding to a given probability (area) in a normal distribution.
6	Sampling Distributions	16 Days	• I can distinguish between a parameter and a statistic. • I can create a sampling distribution using all possible samples from a small population. • I can use the sampling distribution of a statistic to evaluate a claim about a

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			parameter. • I can determine if a statistic is an unbiased estimator of a population parameter. • I can Describe the relationship between sample size and the variability of a statistic. • I can calculate the mean and the standard deviation of the sampling distribution of a sample count and interpret the standard deviation. • I can determine if the sampling distribution of a sample count is approximately normal. • I can, if appropriate, use the normal approximation to the binomial distribution to calculate probabilities involving a sample count. • I can Calculate the mean and standard deviation of the sampling distribution of a sample proportion $\hat{p}$ and interpret the standard deviation. • I can Determine if the sampling distribution of $\hat{p}$ is approximately normal. • I can If appropriate, use a normal distribution to calculate probabilities involving . • I can find the mean and standard deviation of the sampling distribution of a sample mean x and interpret the standard deviation. • I can use a normal distribution to calculate probabilities involving when sampling from a normal population. • I can determine if the sampling distribution of x is approximately normal when sampling from a non- normal population. • I can, if appropriate, use a normal distribution to calculate probabilities involving x.
7	Estimating a Parameter	16 Days	• I can interpret a confidence interval in context. • I can determine the point estimate and margin of error from a confidence interval. • I can use confidence intervals to make decisions. • I can interpret a confidence level in context. • I can Describe how the confidence level and sample size affect the margin of error. • I can explain how practical issues like nonresponse, undercoverage, and response

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			bias can affect the interpretation of a confidence interval. • I can Check the Random and Large Counts conditions for constructing a confidence interval for a population proportion. • I can determine the critical value for calculating a *C*% confidence interval for a population proportion using Table A or technology. • I can Calculate a *C*% confidence interval for a population proportion. • I can use the four-step process to construct and interpret a confidence interval for a population proportion. • I can determine the sample size required to obtain a *C*% confidence interval for a population proportion with a specified margin of error. • I can State and check the Random and Normal/Large Sample conditions for constructing a confidence interval for a population mean. • I can determine critical values for calculating a *C*% confidence interval for a population mean. • I can Calculate a *C*% confidence interval for a population mean • I can use sample data to check the Normal/Large Sample condition. • I can use the four-step process to construct and interpret a confidence interval for a population mean.
8	Testing a Claim	16 Days	• I can state appropriate hypotheses for a significance test about a population parameter. • I can interpret a *P*-value in context. • I can make an appropriate conclusion for a significance test based on a *P*-value. • I can determine if the results of a study are statistically significant and make an appropriate conclusion using a significance level. • I can interpret a Type I error and a Type II error in context. • I can give a consequence of a Type I error and a Type II error in a given setting. • I can Check the Random and Large Counts conditions for performing a significance

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			test about a population proportion. • I can calculate the standardized test statistic for a significance test about a population proportion. • I can Find the *P*-value for a one-sided significance test about a population proportion using Table A or technology. • I can use the four-step process to perform a one-sided significance test about a population proportion. • I can Calculate the *P*-value for a two-sided significance test about a population proportion using Table A or technology. • I can use the four-step process to perform a two-sided significance test about a population proportion. • I can Check the Random and Normal/Large Sample conditions for performing a significance test about a population mean. • I can calculate the standardized test statistic for a significance test about a population mean. • I can find the *P*-value for a significance test about a population mean using Table B. • I can use the four-step process to perform a significance test about a population mean. • I can use a confidence interval to draw a conclusion about a two-sided test for a population mean.

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Intro to STEM			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Linear Functions		
2	Polynomials		
3	Rational Functions		
4	Radical Functions		
5	Exponential Functions		

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Pre Calculus			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
0	Review of Important Concepts	2-3	**POSSIBLE topics: (depends on student need)** • Writing linear functions, factoring, completing the square, vertex form of a quadratic, graphing quadratics, function/function notation
1	Chapter 3: Linear and Quadratic Functions	5-7	• **Standard: Students can build models of linear and quadratic functions.** ○ build and use linear models from verbal descriptions ○ distinguish between linear and nonlinear relationships ○ use a graphing utility to find a line of best fit from data. ○ build and use quadratic models from verbal descriptions. ○ use a graphing utility to find a quadratic model from data. ○ *Quadratic inequalities?*
2	Chapter 4 (Part 1): Polynomial Functions	14-16 Days	• **Standard: Students can identify, graph, and analyze basic polynomial functions.** ○ graph a polynomial function. ○ find the real zeros of a polynomial function and their multiplicities. ○ analyze the graph of a polynomial (including end-behavior, intercepts, turning points, and increasing/decreasing) ○ Use the Remainder and Factor Theorems ○ find a polynomial function with given zeros ○ use the Conjugate Pairs Theorem ○ use the Theorem for Bounds on polynomials ○ use Descartes' Rule of Signs and Rational Zero Theorem to find possible zeros of a polynomial ○ find all complex zeros of a polynomial function
3	Chapter 4 (Part 2): Rational Functions	9-11	• **Standard: Students can identify, graph, and analyze basic rational functions.** ○ find the domain of a rational function ○ find the asymptotes of a rational function ○ find the intercepts of a rational function ○ write a rational function in lowest terms

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			○ graph a rational function with vertical and horizontal asymptotes ○ give the coordinate of a hole in the graph of a rational function ○ graph a rational function with an oblique asymptote ○ solve a rational inequality
4	Chapter 5: Exponential and Logarithmic Functions	13-15	• **Standard: Students can graph and analyze exponential and logarithmic functions.** ○ graph an exponential function ○ analyze an exponential function (domain, range, asymptote, intercepts) ○ graph logarithmic functions ○ analyze a logarithmic function (domain, range, asymptote, intercepts) ○ evaluate logarithmic of any base ○ find an inverse function ○ verify two functions are inverses of each other using composition • **Standard: Students can solve exponential and logarithmic equations.** ○ solve exponential equations ○ solve logarithmic equations by switching forms ○ condense logarithms using properties. ○ expand logarithms using properties ○ solve logarithmic equations using properties
5	Chapter 6: Trigonometric Functions	15-17	• **Standard: Students can sketch and convert angles and use the Unit Circle to solve problems.** ○ identify in which quadrant the terminal side of a standard position angle will be in ○ find the exact values of the trig functions at angles in a single rotation of unit circle ○ find the value of an angle in the unit circle given the coordinate that lies on the unit circle. ○ find the exact value of the trig functions at angles outside of a single rotation of the unit circle, including negative values. ○ find the remaining ratios of an angle given a ratio NOT on the unit circle • **Standard: Students can graph trigonometric functions.** ○ find the amplitude, period, and shifts of a trigonometric function ○ sketch graphs of sine and cosine functions. ○ sketch graphs of tangent functions.

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			○ write a sine or cosine function given the amplitude, period, and/or shifts ○ sketch graphs of secant and cosecant functions.
6	Chapter 7: Analytic Trigonometry	20-24 (split into two tests...need to shorten)	● **Standard: Students can evaluate inverse trigonometric expressions and solve trigonometric equations.** ○ find exact values of inverse trigonometric expressions. ○ find exact values of composites involving a trigonometric function and its own inverse. ○ find the inverse function of a trigonometric function. ○ solve a trigonometric equation involving a single function. ○ solve trigonometric equations in Quadratic forms. ○ solve trigonometric equations using a calculator. ○ find exact values of composites of trigonometric functions and inverses ○ solve a multiple-angle trigonometric equation ○ solve trigonometric equations using identities. ● **Standard: Students can verify trigonometric identities and use identities to find exact values.** ○ verify trigonometric identities using other basic identities ○ use Sum/Difference formulas to find the exact value of a given angle ○ use Half Angle formulas to find the exact value of a given angle ○ find exact values using Sum, Difference, and Double Angle Formulas for sine and cosine ○ verify trigonometric identities involving conjugates ○ simplify completely any exact values obtained from using Sum, DIfference, Double, or Half Angle Formulas ○ find exact values using Sum, Difference, and Double Angle Formulas for tangent
7	Chapter 8: Trigonometric Applications	8 - 10	● **Standard: Students can solve and find the area of triangles using the Trigonometric Laws** ○ solve a problem involving triangles in a context ○ solve triangles using the Law of Sines (AAS/ASA)

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			○ solve triangles using the Law of Cosines. (SAS) ○ solve triangles using the Law of Cosines (SSS) ○ find the area of SAS triangles using a formula ○ solve triangles involving the Ambiguous Case of the Law of Sines. ○ find the area of SSS triangles using Heron's formula.
8	Chapter 10: Analytic Geometry (Conic Sections)	10-12	● **Standard: Students can analyze and graph conic sections** ○ write equations for circles given key features ○ give key features of circles ○ give key features of parabolas ○ graph parabolas ○ give key features of ellipses ○ graph ellipses ○ write equations for circles by completing the square ○ write equations for parabolas by completing the square ○ write equations for ellipses given key features ○ *(ideally, add Hyperbolas to this)*
9	Chapter 12: Sequences and Series	10-12	● **Standard: Students can describe, write, and find sums of sequences** ○ find terms of a sequence ○ use summation notation to find sums ○ determine if a sequence is arithmetic, geometric, or neither ○ find the sum of an arithmetic series ○ determine if a geometric series converges or diverges ○ give the nth term formula of a sequence ○ find the sum of sequence algebraically using summation properties and formulas ○ find the sum of a geometric series ● **Standard: Students can apply the Binomial Theorem and Mathematical Induction.** ○ expand a binomial of form (x+a) using the binomial theorem ○ find a coefficient of a term of a binomial expansion using the binomial theorem ○ find the term of a binomial expansion using the binomial theorem ○ expand a binomial of the form (ax+by) using the binomial theorem

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			○ prove a statement using mathematical induction
10	Chapter 14: Limits, Derivatives, and Integrals	5-7	• **Standard: Students can find an use limits of functions** • **Standard: Students can find derivatives and integrals**
11	Chapter 9: Polar Coordinates	5-7	• **Standard: Students can represent and convert polar coordinates and equations.**

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AP Calculus AB			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Prerequisites for Calculus	10	• Students can be able to utilize the ideas of increments and slope, point-slope, and other forms of a linear function. • Students can find parallel and perpendicular lines to given lines. • Students can solve two linear equations simultaneously. • Students can master the ideas of functions and their domains and ranges. • Students can view and interpret graphs. • Students can discern the difference between even and odd functions and investigate their symmetries. • Students can demonstrate an understanding of piecewise-defined functions, absolute value functions, and composite functions. • Students can apply the ideas of exponential growth and decay, compound interest, and the number e to solve mathematical and other contexts. • Students can apply the ideas of parametric equations to solve problems involving relations, circles, ellipses, lines, and other curves. • Students can apply the concepts and properties of One-to-One functions, inverses, and logarithmic functions to solve mathematical and other contexts. • Students can apply the ideas of radian measure, trigonometric functions, their inverses, and their graphs, even and odd

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			functions in order to solve mathematical and other contexts.
2	Limits and Continuity	12	• Students can use functions, in particular those modeling free fall of objects, to answer questions concerning average and instantaneous speed. • Students can understand the definition of limits. • Students can use properties of limits to solve problems with 1-sided and 2-sided limits. • Students can understand the squeeze theorem. • Students can solve problems involving finite limits as x approaches infinity. • Students can find infinite limits as x goes to a constant. • Students can model end behavior. • Students can demonstrate an understanding of continuity at a point. • Students can solve problems involving continuity with a variety of functions including piecewise • Students can solve a variety of mathematical and in-context applications involving the Intermediate Value Theorem for Continuous Functions. • Students can use data and functions to analyze the instantaneous and average rate of change. • Students can find equations of tangent and normal lines.
3	Derivatives	16	• Students can use the definition to find a derivative. • Students can use graphs to demonstrate the connection between f and f′. • Students can use data to graph derivatives. • Students can calculate one-sided derivatives. • Students can understand, both graphically and analytically, how f′(a) might fail to exist. • Students can understand how differentiability implies local linearity and continuity. • Students can understand the Intermediate Value Theorem for Derivatives. • Students can find derivatives and higher order derivatives of polynomials using multiples, sums, differences, and negative

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			integer powers of x. • Students can solve mathematical and applications in context by finding derivatives using the product rule and quotient rule. • Students can solve applications in a context involving instantaneous rate of change. • Students can use the derivative to investigate motion on a line. • Students can use derivatives to investigate sensitivity to change. • Students can find derivatives of functions involving the sine and cosine functions. • Students can solve applications in context with these. • Students can find derivatives of functions involving the secant, cosecant, tangent, and cotangent functions. • Students can solve applications in the context involving these.
4	More Derivatives	12	• Students can find derivatives of functions using the chain rule of both traditional and parameterized curves. • Students can use these to solve applications in context. • Students can find derivatives of functions using the chain rule in 3+ link chains. Students can use these to solve applications in context. • Students can differentiate functions implicitly of first and second order. • Students can find derivatives of rational powered functions. • Students can use implicit differentiation to find equations of tangent and/or normal lines to curves. • Students can find the derivative to inverse trigonometric functions and apply these to questions in context. • Students can apply the inverse slope relationship to solve mathematical problems. • Students can find the derivatives of all exponential and logarithmic functions and use these to solve applications in context. • Differential Equations and Mathematical Modeling
5	Applications of	35	• Students can understand the difference

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	Derivatives		between absolute (global) extreme values and relative extreme values. • Students can use the known 3 critical points of a function on a given domain to find such extreme values. • Students can apply the Mean Value Theorem to mathematical applications and those in context. • Students can utilize the definition of increasing and decreasing functions. • Students can use the First Derivative Test to help sketch curves. • Students can solve mathematical problems using the first derivative test. • Students can learn about the nature of functions from their derivatives. • Students can use the Second Derivative Test to help sketch curves. • Students can answer questions involving inflection points. • Students can solve mathematical problems and learn about the nature of functions from their second derivatives. • Students can solve mathematical problems, business, economics, and other contexts using optimization. • Students can use linear approximations and differentials to estimate values of functions. • Students can use Newton's Method to find zeros of functions. • Students can solve mathematical and real-world problems using related rates.
6	The Definite Integral	16	• Students can solve applications in context using the Rectangular Approximation Method to approximate the values of antiderivatives of functions over intervals given in both function and data form. • Students can use the definite integral of function to determine area and view the integral as an accumulator. • Students can calculate a definite integral using areas and properties of definite integrals. • Students can apply definite integrals to problems involving the average value of a function. • Students can analyze functions using the FTOC defined by an integral. • Students can evaluate definite integrals.

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			• Students can approximate values of definite integrals using the Trapezoidal Rule
7	Differential Equations and Mathematical Modeling	21	• Students can solve differential equations, both generally and particularly, to solve mathematical applications and those in context. • Students can understand the connection to slope fields. • Students can use Euler's method to construct solutions to differential equations numerically. • Students can find antiderivatives of functions using the technique of substitution to reverse the effect of the chain rule in differentiation. • Students can use the integration by substitution to evaluate definite integrals. • Students can solve separable differential equations. • Students can use separable differential equations to solve problems involving exponential growth and decay. • Students can use the solution to the specific differential equation from Newton's Law of cooling to answer questions in this context. • Students can solve the logistic growth differential equation. • Students can use both the original equation and its solution to answer problems in this context.
8	Applications of Definite Integrals	30	• Students can apply the definite integral to problems involving motion. • Students can use the definite integral to solve problems involving accumulation. • Students can use a definite integral to find areas between curves with emphasis on the limit of a Riemann Sum with rectangles perpendicular to the x-axis. • Students can use a definite integral to find areas between curves with emphasis on the limit of a Riemann Sum with rectangles perpendicular to the x or y-axis. • Students can use the definite integral, with emphasis on the limit of a Riemann Sum of disks or washers as cross sections, to find volumes of objects generated by functions revolving about vertical or horizontal axes. • Students can use the definite integral, with emphasis on the limit of a Riemann Sum, to

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			find volumes of objects generated by functions lying in the x-y plane and a 3rd dimension defined by a variety of 2-dimensional cross-sections.

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AP Calculus BC			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Prerequisites for Calculus	8	• Students can be able to utilize the ideas of increments and slope, point-slope, and other forms of a linear function. • Students can find parallel and perpendicular lines to given lines. • Students can solve two linear equations simultaneously. • Students can master the ideas of functions and their domains and ranges. • Students can view and interpret graphs. • Students can discern the difference between even and odd functions and investigate their symmetries. • Students can demonstrate an understanding of piecewise-defined functions, absolute value functions, and composite functions. • Students can apply the ideas of exponential growth and decay, compound interest, and the number e to solve mathematical and other contexts. • Students can apply the ideas of parametric equations to solve problems involving relations, circles, ellipses, lines, and other curves. • Students can apply the concepts and properties of One-to-One functions, inverses, and logarithmic functions to solve mathematical and other contexts. • Students can apply the ideas of radian measure, trigonometric functions, their inverses, and their graphs, even and odd functions in order to solve mathematical and other contexts.
2	Limits and Continuity	14	• Students can use functions, in particular those modeling free fall of objects, to answer questions concerning average and

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			instantaneous speed. • Students can understand the definition of limits. • Students can use properties of limits to solve problems with 1-sided and 2-sided limits. • Students can understand the squeeze theorem. • Students can solve problems involving finite limits as x approaches infinity. • Students can find infinite limits as x goes to a constant. • Students can model end behavior. • Students can demonstrate an understanding of continuity at a point. • Students can solve problems involving continuity with a variety of functions including piecewise • Students can solve a variety of mathematical and in-context applications involving the Intermediate Value Theorem for Continuous Functions. • Students can use data and functions to analyze the instantaneous and average rate of change. • Students can find equations of tangent and normal lines. •
3	Derivatives	15	• Students can use the definition to find a derivative. • Students can use graphs to demonstrate the connection between f and f′. • Students can use data to graph derivatives. • Students can calculate one-sided derivatives. • Students can understand, both graphically and analytically, how f′(a) might fail to exist. • Students can understand how differentiability implies local linearity and continuity. • Students can understand the Intermediate Value Theorem for Derivatives. • Students can find derivatives and higher order derivatives of polynomials using multiples, sums, differences, and negative integer powers of x. • Students can solve mathematical and applications in context by finding derivatives using the product rule and

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			quotient rule. • Students can solve applications in a context involving instantaneous rate of change. • Students can use the derivative to investigate motion on a line. • Students can use derivatives to investigate sensitivity to change. • Students can find derivatives of functions involving the sine and cosine functions. • Students can solve applications in context with these. • Students can find derivatives of functions involving the secant, cosecant, tangent, and cotangent functions. • Students can solve applications in the context involving these.
4	More Derivatives	15	• Students can find derivatives of functions using the chain rule of both traditional and parameterized curves. • Students can use these to solve applications in context. • Students can find derivatives of functions using the chain rule in 3+ link chains. Students can use these to solve applications in context. • Students can differentiate functions implicitly of first and second order. • Students can find derivatives of rational powered functions. • Students can use implicit differentiation to find equations of tangent and/or normal lines to curves. • Students can find the derivative to inverse trigonometric functions and apply these to questions in context. • Students can apply the inverse slope relationship to solve mathematical problems. • Students can find the derivatives of all exponential and logarithmic functions and use these to solve applications in context.
5	Applications of Derivatives	16	• Students can understand the difference between absolute (global) extreme values and relative extreme values. • Students can use the known 3 critical points of a function on a given domain to find such extreme values.

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			• Students can apply the Mean Value Theorem to mathematical applications and those in context. • Students can utilize the definition of increasing and decreasing functions. • Students can use the First Derivative Test to help sketch curves. • Students can solve mathematical problems using the first derivative test. • Students can learn about the nature of functions from their derivatives. • Students can use the Second Derivative Test to help sketch curves. • Students can answer questions involving inflection points. • Students can solve mathematical problems and learn about the nature of functions from their second derivatives. • Students can solve mathematical problems, business, economics, and other contexts using optimization. • Students can use linear approximations and differentials to estimate values of functions. • Students can use Newton's Method to find zeros of functions. • Students can solve mathematical and real-world problems using related rates.
6	The Definite Integral	15	• Students can solve applications in context using the Rectangular Approximation Method to approximate the values of antiderivatives of functions over intervals given in both function and data form. • Students can use the definite integral of function to determine area and view the integral as an accumulator. • Students can calculate a definite integral using areas and properties of definite integrals. • Students can apply definite integrals to problems involving the average value of a function. • Students can analyze functions using the FTOC defined by an integral. • Students can evaluate definite integrals. • Students can approximate values of definite integrals using the Trapezoidal Rule
7	Differential Equations and Mathematical Modeling	16	• Students can solve differential equations, both generally and particularly, to solve mathematical applications and those in

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			context. • Students can understand the connection to slope fields. • Students can use Euler's method to construct solutions to differential equations numerically. • Students can find antiderivatives of functions using the technique of substitution to reverse the effect of the chain rule in differentiation. • Students can use the integration by substitution to evaluate definite integrals. • Students can find antiderivatives of functions using the technique of integration by parts. • Students can solve separable differential equations. • Students can use separable differential equations to solve problems involving exponential growth and decay. • Students can use the solution to the specific differential equation from Newton's Law of cooling to answer questions in this context. • Students can find antiderivatives using the technique of partial fractions. • Students can solve the logistic growth differential equation. • Students can use both the original equation and its solution to answer problems in this context.
8	Applications of Definite Integrals	15	• Students can apply the definite integral to problems involving motion. • Students can use the definite integral to solve problems involving accumulation. • Students can use a definite integral to find areas between curves with emphasis on the limit of a Riemann Sum with rectangles perpendicular to the x-axis. • Students can use a definite integral to find areas between curves with emphasis on the limit of a Riemann Sum with rectangles perpendicular to the x or y-axis. • Students can use the definite integral, with emphasis on the limit of a Riemann Sum of disks or washers as cross sections, to find volumes of objects generated by functions revolving about vertical or horizontal axes. • Students can use the definite integral, with emphasis on the limit of a Riemann Sum, to

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			find volumes of objects generated by functions lying in the x-y plane and a 3rd dimension defined by a variety of 2-dimensional cross-sections. • Students can use the definite integral to solve problems involving the length of curves. • Students can use the definite integral to solve a variety of problems involving work. • Students can use the definite integral to solve problems involving fluid pressure and normal distribution.
9	Sequences, L'Hospital's Rule, and Improper Integrals	12	• Students can construct and manipulate sequences of various kinds. • Students can analyze sequences (Geometric and otherwise) for convergence or divergence. • Students can use L-Hospital's Rule to determine limits of the indeterminate forms 0/0,∞/∞,∞·0,∞---∞ • Students can use L-Hospital's Rule to determine limits of the indeterminate forms 1^∞,0^0,∞^0. • Students can compare growth rates of various function types as the independent variable increases without bound without L'Hospital's Rule. • Students can compare growth rates of various function types as the independent variable increases without bound using L'Hospital's Rule. • Students can evaluate improper integrals with one of the limits at plus or minus infinity. • Students can evaluate improper integrals with one of the limits an infinite discontinuity. • Students can analyze the comparison test for convergence as it applies to integrals. • Students can evaluate improper integrals with both of the limits at plus or minus infinity. • Students can evaluate improper integrals with one of the limits of an infinite discontinuity. • Students can analyze the comparison test for convergence as it applies to integrals.
10	Infinite Series	28	• Students can understand the difference between finite and infinite sums.

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			• Students can recognize Geometric series in both summation and power series form and be able to convert between the two forms. • Students can determine the convergence of divergence of said series, and find the finite sum if convergent. • Students can integrate and differentiate power series term by term. • Students can derive the power series for • 1/(1-x),1/(1+x),ln(1+x),1/(1+x^2),arctan(x),e^x. • Students can build a power series through matching values of 1st and higher-order derivatives. • Students can likewise build the Maclaurin series for sin(x) and cos(x), investigating the effect graphically on these polynomial approximations as n increases. • Students can recognize these as the Taylor Series. • Students can combine and manipulate the Taylor Series to form a new series. • Students can prove Euler's Theorem involving the 5 important constants. • Students can use the Alternating Series bound to place limits on truncation errors for finite power (Alternating) series. • Students can generate the general formula present in Taylor's Theorem. • Students can utilize this theorem to answer questions about power series. • Students can use the Lagrange error bound (Remainder Bounding Theorem) to place limits on truncation errors for general finite power series. • Students can use the nth term test, direct comparison test, and ratio test to determine absolute and conditional convergence. • Students can find the RADIUS of convergence for power series. • Students can test for possible behavior at the endpoints of an interval of convergence of power series. • Students can use the integral test, the harmonic series, and all p-series to determine absolute and conditional convergence of a power series. • Students can determine the intervals of convergence (including checks at endpoints) for these power series.

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11	Parametric, Vector, and Polar Functions	14	• Students can extend the calculus of 1st and 2nd-order derivatives to parametrically defined functions to calculate the slope and concavity of curves. • Students can calculate the length of a parametrically defined curve. • Students can generate velocity and acceleration vector-valued functions and vectors given position vector-valued functions. • Students can calculate vertical and horizontal displacements and speeds at specific times. • Students can utilize vector-valued functions to answer questions about horizontal, and vertical positions and displacements, velocities, and accelerations as it applies to situations in context. • Students can calculate the slopes of curves given by a polar function. • Students can calculate areas bounded by one or 2 polar curves.

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AP Statistics			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Data Analysis	16 Days	• I can identify the individuals and variables in a set of data. • I can classify variables as categorical or quantitative. • I can make and interpret bar graphs for categorical data. • I can identify what makes some graphs of categorical data misleading. • I can calculate marginal and joint relative frequencies from a two-way table. • I can calculate conditional relative frequencies from a two-way table. • I can use bar graphs to compare distributions of categorical data. • I can Describe the nature of the association between two categorical variables. • I can make and interpret dotplots,

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			stemplots, and histograms of quantitative data. • I can identify the shape of a distribution from a graph. • I can Describe the overall pattern (shape, center, and variability) of a distribution and identify any major departures from the pattern (outliers). • I can compare distributions of quantitative data using dotplots, stemplots, and histograms. • I can calculate measures of center (mean, median) for a distribution of quantitative data. • I can calculate and interpret measures of variability (range, standard deviation, *IQR*) for a distribution of quantitative data. • I can explain how outliers and skewness affect measures of center and variability. • I can identify outliers using the 1.5 × *IQR* rule. • I can make and interpret boxplots of quantitative data. • I can use boxplots and numerical summaries to compare distributions of quantitative data.
2	Modeling Distributions of Data	10 Days	• I can find and interpret the percentile of an individual value in a distribution of data. • I can Estimate percentiles and individual values using a cumulative relative frequency graph. • I can find and interpret the standardized score (*z*-score) of an individual value in a distribution of data. • I can Describe the effect of adding, subtracting, multiplying by, or dividing by a constant on the shape, center, and variability of a distribution of data. • I can use a density curve to model distributions of quantitative data. • I can identify the relative locations of the mean and median of a distribution from a density curve. • I can use the 68–95–99.7 rule to estimate (i) the proportion of values in a specified interval, or (ii) the value that corresponds to a given percentile in a Normal distribution.

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			• I can find the proportion of values in a specified interval in a Normal distribution using Table A or technology. • I can find the value that corresponds to a given percentile in a Normal distribution using Table A or technology. • I can determine whether a distribution of data is approximately Normal from graphical and numerical evidence.
3	Describing Relationships	13 Days	• I can distinguish between explanatory and response variables for quantitative data. • I can make a scatterplot to display the relationship between two quantitative variables. • I can Describe the direction, form, and strength of a relationship displayed in a scatterplot and identify unusual features. • I can interpret the correlation. • I can understand the basic properties of correlation, including how the correlation is influenced by outliers. • I can distinguish correlation from causation. • I can make predictions using regression lines, keeping in mind the dangers of extrapolation. • I can calculate and interpret a residual. • I can interpret the slope and y intercept of a regression line. • I can determine the equation of a least-squares regression line using technology or computer output. • I can Construct and interpret residual plots to assess whether a regression model is appropriate. • I can interpret the standard deviation of the residuals and r^2 and use these values to assess how well a least-squares regression line models the relationship between two variables. • I can Describe how the least-squares regression line, standard deviation of the residuals, and r^2 are influenced by outliers. • I can find the slope and y intercept of the least-squares regression line from the

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			means and standard deviations of x and y and their correlation.
4	Collecting Data	14 Days	• I can identify the population and sample in a statistical study. • I can identify voluntary response sampling and convenience sampling and explain how these sampling methods can lead to bias. • I can Describe how to select a simple random sample with technology or a table of random digits. • I can describe how to select a sample using stratified random sampling and cluster sampling, distinguish stratified random sampling from cluster sampling, and give an advantage of each method. • I can explain how undercoverage, nonresponse, question wording, and other aspects of a sample survey can lead to bias. • I can explain the concept of confounding and how it limits the ability to make cause-and-effect conclusions. • I can distinguish between an observational study and an experiment, and identify the explanatory and response variables in each type of study. • I can identify the experimental units and treatments in an experiment. • I can Describe the placebo effect and the purpose of blinding in an experiment. • I can Describe how to randomly assign treatments in an experiment using slips of paper, technology, or a table of random digits. • I can explain the purpose of comparison, random assignment, control, and replication in an experiment. • I can Describe a completely randomized design for an experiment. • I can Describe a randomized block design and a matched pairs design for an experiment and explain the purpose of blocking in an experiment.

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			• I can explain the concept of sampling variability when making an inference about a population and how sample size affects sampling variability. • I can Explain the meaning of statistically significant in the context of an experiment and use simulation to determine if the results of an experiment are statistically significant. • I can identify when it is appropriate to make an inference about a population and when it is appropriate to make an inference about cause and effect.
5	Probability	11 Days	• I can interpret probability as a long-run relative frequency. • I can use simulation to model chance behavior. • I can give a probability model for a chance process with equally likely outcomes and use it to find the probability of an event. • I can use basic probability rules, including the complement rule, and the addition rule for mutually exclusive events. • I can use a two-way table or Venn diagram to model a chance process and calculate probabilities involving two events. • I can apply the general addition rule to calculate probabilities. • I can calculate and interpret conditional probabilities. • I can determine whether two events are independent. • I can use the general multiplication rule to calculate probabilities. • I can use a tree diagram to model a chance process involving a sequence of outcomes and to find probabilities. • I can, when appropriate, use the multiplication rule for independent events to calculate probabilities.
6	Random Variables	15 Days	• I can use the probability distribution of a discrete random variable to calculate the probability of an event.

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			• I can make a histogram to display the probability distribution of a discrete random variable and describe its shape. • I can calculate and interpret the mean (expected value) of a discrete random variable. • I can calculate and interpret the standard deviation of a discrete random variable. • I can use the probability distribution of a continuous random variable (uniform or Normal) to calculate the probability of an event. • I can Describe the effect of adding or subtracting a constant or multiplying or dividing by a constant on the probability distribution of a random variable. • I can calculate the mean and standard deviation of the sum or difference of random variables. • I can find probabilities involving the sum or difference of independent Normal random variables. • I can determine whether the conditions for a binomial setting are met. • I can Calculate and interpret probabilities involving binomial distributions. • I can calculate the mean and standard deviation of a binomial random variable. Interpret these values in context. • I can, when appropriate, use the Normal approximation to the binomial distribution to calculate probabilities. • I can find probabilities involving geometric random variables.
7	Sampling Distributions	9 Days	• I can distinguish between a parameter and a statistic. • I can create a sampling distribution using all possible samples from a small population. • I can use the sampling distribution of a statistic to evaluate a claim about a parameter. • I can distinguish among the distribution of

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			a population, the distribution of a sample, and the sampling distribution of a statistic. • I can determine if a statistic is an unbiased estimator of a population parameter. • I can Describe the relationship between sample size and the variability of a statistic. • I can calculate the mean and standard deviation of the sampling distribution of a sample proportion and interpret the standard deviation. • I can determine if the sampling distribution is approximately Normal. • I can If appropriate, use a Normal distribution to calculate probabilities involving . • I can calculate the mean and standard deviation of the sampling distribution of a sample mean and interpret the standard deviation. • I can explain how the shape of the sampling distribution is affected by the shape of the population distribution and the sample size. • I can If appropriate, use a Normal distribution to calculate probabilities involving .
8	Estimating With Confidence	14 Days	• I can Identify an appropriate point estimator and calculate the value of a point estimate. • I can interpret a confidence interval in context. • I can determine the point estimate and margin of error from a confidence interval. • I can use a confidence interval to make a decision about the value of a parameter. • I can interpret a confidence level in context. • I can Describe how the sample size and confidence level affect the margin of error. • I can explain how practical issues like nonresponse, undercoverage, and response bias can affect the interpretation of a confidence interval. • I can State and check the Random, 10%, and Large Counts conditions for

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			constructing a confidence interval for a population proportion. • I can determine the critical value for calculating a *C*% confidence interval for a population proportion using a table or technology. • I can Construct and interpret a confidence interval for a population proportion. • I can determine the sample size required to obtain a *C*% confidence interval for a population proportion with a specified margin of error. • I can determine the critical value for calculating a *C*% confidence interval for a population mean using a table or technology. • I can State and check the Random, 10%, and Normal/Large Sample conditions for constructing a confidence interval for a population mean. • I can construct and interpret a confidence interval for a population mean. • I can determine the sample size required to obtain a *C*% confidence interval for a population mean with a specified margin of error.
9	Testing a Claim	12 Days	• I can state appropriate hypotheses for a significance test about a population parameter. • I can interpret a *P*-value in context. • I can make an appropriate conclusion for a significance test. • I can interpret a Type I error and a Type II error in context. Give a consequence of each error in a given setting. • I can State and check the Random, 10%, and Large Counts conditions for performing a significance test about a population proportion. • I can calculate the standardized test statistic and *P*-value for a test about a population proportion. • I can perform a significance test about a

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			population proportion. • State and check the Random, 10%, and Normal/Large Sample conditions for performing a significance test about a population mean. • Calculate the standardized test statistic and *P*-value for a test about a population mean. • Perform a significance test about a population mean. • Use a confidence interval to make a conclusion for a two-sided test about a population parameter. • Interpret the power of a significance test and describe what factors affect the power of a test.
10	Comparing Two Populations or Treatments	11 Days	• I can Describe the shape, center, and variability of the sampling distribution of . • I can determine whether the conditions are met for doing inference about a difference between two proportions. • I can Construct and interpret a confidence interval for a difference between two proportions. • I can calculate the standardized test statistic and *P*-value for a test about a difference between two proportions. • I can perform a significance test about a difference between two proportions. • I can Describe the shape, center, and variability of the sampling distribution of . • I can determine whether the conditions are met for doing inference about a difference between two means. • I can Construct and interpret a confidence interval for the difference between two means. • I can calculate the standardized test statistic and *P*-value for a test about a difference between two means. • I can perform a significance test about a difference between two means. • I can analyze the distribution of differences in a paired data set using graphs and

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			summary statistics. • I can Construct and interpret a confidence interval for a true mean difference. • I can perform a significance test about a true mean difference. • I can determine when it is appropriate to use paired *t* procedures versus two-sample *t* procedures.
11	Inference for Distributions of Categorical Data	10 Days	• I can state appropriate hypotheses and compute the expected counts and chi-square test statistic for a chi-square test for goodness of fit. • I can State and check the Random, 10%, and Large Counts conditions for performing a chi-square test for goodness of fit. • I can calculate the degrees of freedom and *P*-value for a chi-square test for goodness of fit. • I can perform a chi-square test for goodness of fit. • I can conduct a follow-up analysis when the results of a chi-square test are statistically significant. • I can state appropriate hypotheses and compute the expected counts and chi-square test statistic for a chi-square test based on data in a two-way table. • I can State and check the Random, 10%, and Large Counts conditions for a chi-square test based on data in a two-way table. • I can calculate the degrees of freedom and *P*-value for a chi-square test based on data in a two-way table. • I can perform a chi-square test for homogeneity. • I can perform a chi-square test for independence. • I can choose the appropriate chi-square test in a given setting.
12	More About Regression	8 Days	• I can Check the conditions for performing inference about the slope β_1 of the

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			population (true) regression line. • I can interpret the values of b_0, b_1, s, and in context, and determine these values from computer output. • I can construct and interpret a confidence interval for the slope β_1 of the population (true) regression line. • I can perform a significance test about the slope β_1 of the population (true) regression line. • I can use transformations involving powers and roots to find a power model that describes the relationship between two quantitative variables, and use the model to make predictions. • I can use transformations involving logarithms to find a power model that describes the relationship between two quantitative variables, and use the model to make predictions. • I can use transformations involving logarithms to find an exponential model that describes the relationship between two quantitative variables, and use the model to make predictions. • I can determine which of several transformations does a better job of producing a linear relationship.

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Qualitative Literacy			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
			Please refer to the class syllabus for the curriculum outline for this course.

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Dual Credit Algebra			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
			Please refer to the class syllabus for the curriculum outline for this course.

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Physical Education/Health/Driver Education - Class Scope and Sequences

Requirements and Classes:	
PE 9/Introduction to Fitness	Health
Driver's Education/Behind the Wheel	

Electives		
Applied Fitness	Female Applied Fitness	Lifetime Physical Education
P.E. Leadership/HOPE	Total Body Fitness	Walk for Wellness
	Early Bird Physical Education	

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Physical Education 9/Introduction to Fitness

Unit #	Estimated Days	Unit Title	Topics Covered:
1	Roughly 10 Days	Intro & Fitness Testing	• Class Introduction • PE Rules & Regulations (Syllabus) • Introduction to the Fitness Center - Safety Rules - Maintenance • Fitness Testing - Sit-n-Reach, Crunches, Push-ups, and Pacer • Personalization Activity Days • Game Days

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2	Roughly 10 Days	Intro to HRM & Weight Machines	• Introduce Heart Rate Monitors - Assign Sensors - Max Heart Rates - Difference in HR Zones • Introduce the Weight Training Machines - Muscles & Exercises - Form - Technique • Personalization Activity Days • Game Days
3	Roughly 10 Days	Goal Setting & Muscle Chart	• Continue HRM & Weight Training activities in Fitness Center • Use Goal Setting Forms with Students • Introduce the Muscle Chart Muscle Chart Quiz • Personalization Activity Days • Game Days
4	Roughly 10 Days	Fitness Components	• Continue HRM & Weight Training activities in Fitness Center • Introduce the Fitness Components - Health Related - Skill Related - Fitness Component Quiz • Personalization Activity Days • Game Days
5	Roughly 10 Days	Intro to Free Weight Exercises	• Continue HRM & Weight Training activities in Fitness Center • Muscle & Exercise Quiz • Free Weights - Dumbells - Kettlebells - Medicine Balls - Bands • Personalization Activity Days • Game Days
6	Roughly 10 Days	Personal Workout Project Development	• Continue HRM & Weight Training activities in Fitness Center • Personal Workout Project Development
7	Roughly 10 Days	Begin Personal Workout Projects	• Continue HRM & Weight Training activities in Fitness Center • Personal Workout Project • Personalization Activity Days • Game Days
8	Roughly 10	Goal Completion,	• Goal Completion

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	Days	Fitness Testing, & EOCA Review	• Fitness Gram Testing - Pacer - Sit-n-Reach - Sit-ups - Push-ups • Review for Final Exam • EOCA
9	(Only used 2nd Semester)Roughly 5+ Days	Extra Time for Makeups, Fitness Testing, andFinal Exam Review	• End of school year wrap up activities!

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Driver's Education			
Unit #	**Estimated Days**	**Unit Title**	**Topics Covered:**
1	Roughly 2 weeks	Roadway Signs, Signals, and Markings	• Roadway Signs • Roadway Signals • Roadway Markings
2	Roughly 2 weeks	The Driving Task	• GDLP • Being Pulled Over • Identification of risk factors • Driver Responsibility and Risk Management
3	Roughly 3 weeks	Defensive Driving	• How to search the driving environment • IPDE • Zone Control system
4	Roughly 2 weeks	Preparing to Drive	• Identifying vehicle controls • Understanding Vision and Steering control
5	Roughly 2 weeks	Basic Maneuvers	• Understanding how to perform Vehicle Basic Maneuvers.
6	Roughly 3 weeks	ROW/Safety on the Roadway	• Intersection Safety • Recognizing different intersections • Proper actions to take at intersections • Dangers at intersections
7	Roughly 4 weeks	Driver Behavior	• Effects of Alcohol and Drugs on Driving • Laws Related to Alcohol and Drugs and Driving • Impact of Emotions on Driving and Coping Strategies

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			• Driver Distractions and how to Avoiding/Minimizing

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Health Proficiency Table			
Unit #	**Estimated Days**	**Unit Title**	**Topics Covered:**
1	Roughly 3 weeks	Substance Use	• Addiction • Alcohol • Vaping/ E Cigarettes • Marijuana • Prescription Drugs • Illicit Drugs/ Fentanyl
2	Roughly 3 weeks	First Aid/ CPR	• First Aid Kits • Control Bleeds • Sprains/ Strains/ Fractures • Poisons/ Allergies/ Epi Pens • Hypo/ Hyperthermia/ Burns • Diabetes/ Seizures • CPR/ AEDs
3	Roughly 5 weeks	Relationships, Sexuality, Reproduction	• Relationships (Healthy, Unhealthy, Abusive) • Conflicts/ Challenges/ Communication • Erin's Law • Consent • Sexuality/ Gender Identity/ Pronouns • Informed Decisions/ Choices • STI • Contraception • Male/ Female Anatomy • Menstrual Cycle/ Pregnancy
4	Roughly 3 weeks	Nutrition	• Macro/ Micronutrients • MyPlate • Fruits and Veggies • Fast Food • Sugar • Caffeine • Mindful Eating • Food Labels
5	Roughly 3 weeks	Mental Health	• Stigma • Mental Illness • Celebrity Experience • Resources Available

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			• Students reflection of their Mental Health

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Applied Fitness			
Unit #	**Estimated Days**	**Unit Title**	**Topics Covered:**
			Please refer to the scope and sequence document for Female Applied Fitness below.

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Female Applied Fitness			
Unit #	**Estimated Days**	**Unit Title**	**Topics Covered:**
1	Roughly 3 days	Introduction	• Class Expectations and Standards • Goal Setting and Reflections • Dress Requirements • Names of Equipment and location at rack • Core Workouts • Sets and Reps

2	Ongoing	Safety	• Technique for core workouts
			• Spotting
			• Weight room etiquette/behavior
			• Rest and recovery
			  ○ Between sets
			  ○ After workouts
			  ○ Day to day
			• Warm-up/cool down
			• Stretching
			  ○ Static vs. Dynamic

3	Ongoing	Functional Movements	• 7 Core movements
			  ○ What they are
			  ○ When they are used
			  ○ Exercises for each movement

4	Ongoing	Workouts with Workout sheets	• Workout Sheets • Supersetting • Back and Bicep Exercises • Chest, Tricep, and Shoulder Exercises • Lower Body and Ab Exercises • Agility Exercises

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5	Roughly 9 days	Max Outs	• One Rep Max • Multiple Rep Max
6	Roughly 5 days	Fitness Testing	Goal Setting State Standard Expectations Pushups Curl Ups Pacer Sit and Reach
7		Meditation	• Breathing • Mindfulness • Stressreliever and Coping Skills

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Lifetime P.E.			
Unit #	**Estimated Days**	**Unit Title**	**Topics Covered:**
1	10	Class introduction/Fitness test	• Safety • Get to know you time • Rules/Regs • Pacer • Sit-N-Reach • Push-ups • Curl-ups
2	10	Goal setting	• Badminton • Volleyball • Tennis • Pickleball • Self-Reflection Google Form
3	10	Teamwork/Individual skills	• Basketball • Wiffle Ball • Soccer • Three pin Soccer • Speedball ○
4	10	Fitness/Heart rates	• Technique for core workouts • Spotting • Weight room etiquette/behavior • After workouts • Day to day • Warm-up/cool down • Stretching

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			• Self-Reflection Google Form
5	10	Goal Reminder	• Tennis • Pickleball • Badminton • Bags • Kan-Jam

6	10	Teamwork	• Volleyball
			  ○ Regular
			  ○ Ultimate
			  ○ Four-square
			• Basketball
			• Floor hockey
			• Tchoukball
			• Townball
			• Kickball
			• New York Ball
			• Bowling pin soccer
			• Speedball
			• Self-Reflection Google form

7	10	Responsability	• BACKYARD GAMES • BAGS, • WASHER TOSS • LASSO GOLF, • KAN JAM • Ultimate football • Ultimate Frisbee
8	10	Fitness Testing /Goal Outcome	• Pacer • Sit-N-Reach • Push-ups • Curl-ups • Self-Reflection Google Form

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Total Body Fitness			
Unit #	**Estimated Days**	**Unit Title**	**Topics Covered:**
1	5	Class Intro	• Breathing • Modifying • Challenge yourself

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			• Get to know you time • Safety
2	20+ (this is ongoing all semester)	Functional Movement Patterns	• Press/Push • Pull • Hinge • Squat • Carry • Lunge • Twist
3	20+ (this is ongoing all semester)	Progressive Overload	• Understanding sets, reps, rest time, full ROM, changing up exercises
4	15+ (this is ongoing all semester)	Yoga/Guided Meditation	• Breathing • Poses • Sequences • Mindfulness/types of guided meditation
5	20+ (this is ongoing all semester)	Cardio/Aerobic Activity	• Breathing • Technique • Types: HIIT, Stations, IGYG, EMOM, Circuit
6	5	Fitness Testing	• Goal Setting • State Standard Expectations • Pushups • Curl Ups • Pacer • Sit and Reach

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Walk for Wellness			
Unit #	**Estimated Days**	**Unit Title**	**Topics Covered:**
1	5	Class Intro	• Safety • Get to know you time • Rules/Regs
2	5	Walking Conditions	• Walking in different weather successfully • Benefits of walking outside
3	20+ (this is ongoing all semester)	Technology	• Learning how to use Map My Run App • Google Forms 3x per week
4	20+ (this is	Technique	• Pointers on walking correctly

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	ongoing all semester)		• Points on fitness center usage if we get to go in there (a lot of talk on posture) • Taking HR correctly
5	20+ (this is ongoing all semester)	Self Reflection Forms	• Connecting how we feel physically and mentally before and after exercise
6	5	Fitness Testing	• State Standard Expectations • Pushups • Curl Ups • Pacer • Sit and Reach

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Physical Education Leadership/HOPE			
Unit #	**Estimated Days**	**Unit Title**	**Topics Covered:**
			Please refer to the class syllabus for the curriculum outline for this course.

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Science - Class Scope and Sequences

Requirements and Classes: Each student needs to take a minimum of one year of life science and one year of physical science for graduation.	
Life Science (1 year required): Biology/Environmental Science OR Enhanced Biology - Anatomy & Physiology	**Physical Science (1 year required):** Physical Science OR Enhanced Chemistry OR Enhanced Physics

Electives: Can be taken concurrently with required science classes depending on the grade level			
Astronomy	Animal Science	Animal Health & Nutrition	Earth Science
Food Science	Forensic Science	Intro to Horticulture	Advanced Horticulture 1
Advanced Horticulture 2	Horticulture Independent Study: Applications		

Advanced Placement Options			
AP Biology	AP Chemistry	AP Physics 1	AP Environmental Science
		AP Physics 2	

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Biology			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	System Interactions & Feedback Mechanisms	14	• Body systems • Levels of organization • Feedback mechanisms • Characteristics of living things
2	Photosynthesis, Cell Respiration and Macromolecules	15	• Organic chemistry • Organic molecules • Photosynthesis • Cellular respiration
3	DNA & Protein Synthesis	13	• Structure of DNA • DNA replication • Protein synthesis • Mutations
4	Cell Division	11	• Mitosis • Meiosis
5	Genetics	12	• Mendelian genetics • Non-mendelian genetics
6	Evolution	12	• Natural selection • Evidence of Evolution • Common Ancestry • Population Dynamics • Speciation

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Environmental Science			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Earth's History and Processes	15	• Plate Tectonics • Weathering and Erosion
2	Earth Cycles and Climate	18-20	• Earth's Spheres • Photosynthesis/ Cellular Respiration • Carbon Cycle • Climate Change
3	Ecology	25	• Food Webs

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			• Biotic/Abiotic factors • Human impact on ecosystems • Green Technologies

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Enhanced Biology - Anatomy & Physiology			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Intro to EBAP	14	• Hierarchy of Life • Characteristics of Life • Homeostasis ○ Feedback Mechanisms

2	Organic Chem
	Cell Respiration & Photosynthesis
		15	• Properties of Biological Macromolecules
			• Synthesizing Biological Macromolecules
			• Basic Chemistry
			  ○ Water
			  ○ Basic Elements
			  ○ Bonding
			• Cell Respiration
			• Photosynthesis

3	Cells	14	• Parts of the Cell • Types of Cells • Cell Division • Cancer
4	Tissues	13	• Meiosis • Genetic Diversity • DNA • Transcription/Translation • Body Tissues ○ Types and Functions
5	Skeletal Systems	14	• Classification of Bones • Functions of Human Skeleton • Classification of Joints • Pathology of Skeletal Diseases
6	Muscles	15	• Functions of the Muscular System • Steps of Muscle Contraction • Pathology of Muscle Diseases
7	Cardiovascular	15	• Blood Vessels • Blood Typing • Components of Blood • Heart/Lung Disease

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			• Anatomy of Cardiovascular System • Gas Exchange • Lung Capacity
8	Digestive	15	• Stages of Digestion • Breakdown/Absorption of Macromolecules • Digestive Juices • Roles and Functions of Digestive Organs • Pathology of Digestive System
9	Nervous System	15	• Functions of the Nervous System • Divisions of the Nervous System • Neurons and Neuroglia • Parts of the Brain and Nervous System • Pathology of the Nervous System
10	Immune System	15	• Pathogens • Immune System Lines of Defense • Autoimmune Disorders • HIV/AIDS • Immune System Cells • Vaccinations
11	Genetics	15	• Mendelian Genetics • Non-Mendelian Genetics • Complex Inheritance • Pedigrees • Environmental Factors
12	Evolution	15	• Evidence of Evolution ○ Common Ancestry • Natural Selection • Population Genetics

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Physical Science			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	The Atom & Periodic Table	28	• Atom Models • Atom make-up • Organization of the Periodic Table • Valence Electrons • Periodic Trends
2	Bonding & Intermolecular Forces	22	• Properties of Ionic, Covalent, Metallic Bonds • Modeling Ionic Bonds • Modeling Covalent Bonds

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			• Intermolecular Forces
3	Chemical Reactions/ Energy	20	• Conservation of Mass • Balancing Equations • Types of Reactions • Endothermic/ Exothermic Reactions • Potential Energy Diagrams
4	The Mole/ Equilibrium	10	• Molar Mass • Moles & Mole Conversions • Reaction Rates • Equilibrium
5	Newton's Laws and Forces	20	• Motion Graphs • Speed, Velocity, and Acceleration • Newton's Laws of Motion • Universal Law of Gravitation
6	Electricity and Magnetism	11	• Static Electricity • Triboelectric Series • Polarization • Coulomb's Law • Electromagnets
7	Energy	19	• Potential and Kinetic Energy • Energy Forms and Transformations • Law of Conservation of Energy • Types of Thermal Energy Transfers • Specific Heat
8	Momentum	15	• Law of Conservation of Momentum • 1D Collisions • Impulse-Momentum Theorem
9	Electromagnetic Radiation and Waves	11	• Parts of a Wave • Wave Speed • Frequency and Period • Dual Nature of Light • Electromagnetic Spectrum

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Enhanced Chemistry			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Atomic Structure	19	• Atomic Basics • Periodic Table Organization • Periodic Trends

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			• Electron Configuration • Energy in Electrons
2	Bonding	24	• Ionic Bonding • Ionic Naming • Covalent Bonding • Covalent Naming • Lewis Structures
3	Chemical Reaction	16	• Conservation of Mass • Balancing Equations • Types of Reactions • Predicting Products
4	The Mole	16	• Moles & Molar Mass • Mole Conversions • Percent Composition • Empirical Formula • Molecular Formula
5	Stoichiometry	18	• Mole Ratio • Stoichiometry • Limiting Reactant • Excess Reactant • Percent Yield
6	Energy	19	• Conservation of Energy • Endothermic/ Exothermic Reactions • Potential Energy Diagrams • Specific Heat • Calorimetry • Energy of Phase Changes
7	Solutions	20	• Solvation Effects Solids/Gases • Conductivity of Solutions • Mass Percent/Molarity of Solutions • Making Solutions/Dilutions • Solution Stoichiometry • Determining pH/pOH/[H+]/[OH-] • pH Indicators • Acid/Base Reactions • Titrations
8	Kinetics and Equilibrium	12	• Collision Theory • Reaction Rates • Equilibrium Expressions/Calculations • Le Chatelier's Principle
9	Gases	12	• Kinetic Molecular Motion • Conceptual Gas Laws • Gas Law Problems

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			• Ideal Gas Law • Gas Stoichiometry
10	Nuclear Chemistry	N/A	• Fission, Fusion, Radioactive Decay • Alpha, Beta & Gamma Radiation • Nuclear Energy • Balance Nuclear Equations • Half Life

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Enhanced Physics			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Intro to Physics	9	• Significant Figures • Unit Conversions
2	1D & 2D Kinematics	27	• Motion Graphs • 1D Kinematics (Speed, Velocity, and Acceleration) • Vectors • Projectile Motion
3	Forces	19	• Newton's Laws of Motion • Free Body Diagrams • Incline Planes
4	Gravity and Circular Motion	17	• Centripetal Force • Universal Law of Gravitation • Satellite Orbits
5	Energy	21	• Law of Conservation of Energy • Energy Transformations • Work
6	Thermodynamics	13	• Conduction, Convection, and Radiation • Specific Heat • Latent Heat
7	Electrostatics	17	• Static Charge • Coulomb's Law • Electric Fields
8	Electric Circuits	14	• Electric Potential Energy • Electric Potential • Potential Difference • Kirchoff's Laws
9	Momentum	18	• Law of Conservation of Momentum

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			• 1D Collisions • Impulse-Momentum Theorem
10	Waves	8+	• Parts of a Wave • Wave Speed • Electromagnetic Spectrum • Wave vs Particle Theory

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Astronomy			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	History and background of Astronomy		• Our place in space • Earth's orbital motion • The measurement of space • Copernican Revolution • Laws of Planetary Motion
2	How we learn about the Universe		• Electromagnetic spectrum • The Doppler Effect • Spectroscopy • Spectral-Line analysis • Telescopes
3	The Earth & Moon		• Earth, our home in space • Earth's structure • Earth's atmosphere • Moon's orbital properties • Moon exploration over time • Surface features • Moon phases • Moon elongation
4	Survey of the Solar System		• An inventory of Solar System • Measuring the planets • Terrestrial vs Jovian planets • Nebular Theory
5	Stars		• Stellar evolution • Life and death of a Star • H-R Diagram
6	The Milky Way & other Galaxies		• The Milky Way galaxy • Hubble's Galaxy Classification • Hubble's Law • Galaxies and Dark Matter

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Animal Science			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	History and Use of Animals	12	• Animal Uses • Animals in History • Animal Domestication
2	Animal Handling, Safety, and Ethics	15	• Animal Welfare • Animal Behavior • Animal Handling and Facilities
3	Cells, Tissues, and Systems	14	• Animal Tissues • Fetal Pig Dissection
4	Animal Reproduction	12	• Female and Male Anatomy & Dissection • Hormones • Animal Breeding

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Animal Health & Nutrition			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Safety and Terminology	16	• Identify veterinary equipment • Standard cleaning procedures • Handle surgical packs • Medical terminology
2	Prevention	20	• animal health careers • Nail trimming • Animal anatomy • Dog vitals
3	Diagnosis	19	• Keeping medical records • Parasites and disorders • Conducting medical exams
4	Treatment	22	• Injection methods • Vaccines • Prescriptions • Calculating medication dosages

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Earth Science			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
0	Intro to Earth Science		• Lab Safety • Earth's Place in the Solar System
1	Plate Tectonics		• Earth's Interior • Plate Boundaries • Formation of Geologic Features • Mantle Convection
2	Minerals		• Properties of Minerals • Physical Properties Used to Identify Minerals • Mineral Identification
3	Volcanoes and Igneous Rocks		• Formation of Magma • Types of Magma • Types of Volcanoes • Igneous Rock Textures • Igneous Rock Compositions • Identifying Igneous Rocks
4	Weathering, Erosion, and Sedimentary Rocks		• Physical, Chemical, and Biological Weathering • Meandering Rivers • Mass Wasting • Formation of Sedimentary Rocks • Classifying Sedimentary Rocks • Identifying Sedimentary Rocks
5	Metamorphic Rocks		• Regional vs Contact Metamorphism • Classifying Metamorphic Rocks • Identifying Metamorphic Rocks
6	Earthquakes		• Types of Faults • Elastic Rebound Theory • P-waves vs S-waves
7	Geologic Time		• Geologic Timeline • Relative Dating Laws • Absolute Dating (Radioactive Dating)
8	Hydrosphere		• Lake Formation • Dimictic Lake Turnover • Groundwater • Porosity and Permeability • Ocean Tides

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			• Ocean Currents
9	Atmosphere		• Layers of the Atmosphere • Ozone Layer • Greenhouse Effect • Albedo • Global and Local Wind Patterns
10	Meteorology		• Identifying Cloud Types • Intro to Forecasting • Reading Weather Stations

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Food Science			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
			This class was not offered for the 2025-2026 school year. It will be offered again in 2026-2027.

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Forensic Science			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	What is Forensic Science?	9	• Intro to Forensics & the Law • Forensics Careers • Observation Skills
2	CSI & Evidence	13	• Crime Scene Investigation & Sketching • Types of Evidence • Evidence Collection
3	Fingerprints	19	• Fingerprint Patterns • Ridge Characteristics • Fingerprints as Evidence • Developing Latent Fingerprints (Both Physical & Chemical Processes)
4	Toxicology	20	• Toxin Metabolism in the Body • Characteristics of Toxins • Classifying Drugs • Calculating LD50 • Tests using for isolating & identifying drugs

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			& poisons
5	Blood & Blood Spatter	18	• Components of Blood • Blood Typing • Blood Probabilities • Blood as Evidence • Blood Spatter Patterns • Blood Spatter Analysis
6	Final Crime Scene	4	• Crime Scene Sketching • Toxicology Testing • Shoe Impression Analysis • Blood Type Analysis • Fingerprint Analysis • Creating an Argument from Evidence

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Intro to Horticulture			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Introduction to Horticulture		• What is Horticulture • Careers • Plant Uses
2	Soils and Fertilizers		• Soil Texture, Permeability • Soil pH and Salinity • Plant Nutrients and Fertilizer Calculations
3	Plant Anatomy		• Roots, Leaves, Stems, Flowers
4	Plant Taxonomy and Growth Requirements		• Taxonomic Classification • Temperature, Water, Light
5	Floral Design		• Using floral tools • Boutonnieres & Corsages • Elements of Design • Floral Arrangements
6	Plant Propagation		• Sexual Reproduction & Germination • Cuttings, Division, Grafting
7	Plant Pests		• Pest Types • Pest Life Cycles
8	Landscape Design		• Drawing to Scale • Plant Selection

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			• Landscape Drawing

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Advanced Horticulture 1			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
			Please refer to the Advanced Horticulture 1 document under the CTE heading

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Advanced Horticulture 2			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
			Please refer to the Advanced Horticulture 2 document under the CTE heading

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Horticulture Independent Study: Applications			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
			Please refer to the Horticulture Independent Study: Applications document under the CTE heading

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AP Biology			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	DNA & DNA Replication	10	• Characteristics of DNA • Mechanism of DNA replication
2	Protein Synthesis	11	• Transcription • Translation
3	Gene Expression	8	• Gene Expression in Eukaryotes

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			• Gene Expression in Prokaryotes
4	Viruses and Bacteria	13	• Viral Structure and Function • Bacterial Structure and Function
5	Biotechnology	11	• Genetic engineering techniques
6	Evolution	25	• Natural Selection • Evidence for Evolution • Population Genetics • Hardy Weinberg Equilibrium • Speciation
7	History of the Earth	10	• Mass Extinctions • History of Life on Earth
8	Phylogeny	13	• Cladograms/Phylogenetic trees
9	Enzymes & Metabolism	15	• Structure & Function of Enzymes • Energy Dynamics
10	Cell Respiration	15	• Aerobic Respiration • Anaerobic Respiration/Fermentation
11	Photosynthesis	15	• Photosynthesis
12	Plants	9	• Plant Cell Types • Plant Systems • Transpiration
13	Ecology	10	• Disruption of the Ecosystem • Community Ecology • Effect of Density of Populations • Energy Flow through Ecosystems

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AP Chemistry			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Atomic Structure and Properties	15	• Moles and Molar Mass • Mass Spectroscopy of Elements • Elemental Composition of Pure Substances • Composition of Mixtures • Atomic Structure and Electron Configuration • Photoelectron Spectroscopy • Periodic Trends

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			• Valence Electrons and Ionic Compounds
2	Molecular and Ionic Compound Structure and Properties	18	• Types of Chemical Bonds • Intramolecular Force and Potential Energy • Structure of Ionic Solids • Structure of Metals and Alloys • Lewis Diagrams • Resonance and Formal Charge • VSEPR and Bond Hybridization
3	Intermolecular Forces and Properties	20	• Intermolecular Forces • Properties of Solids • Solids, Liquids, and Gases • Ideal Gas Law • Kinetic Molecular Theory • Deviation from Ideal Gas Law • Solutions and Mixtures • Representations of Solutions • Separation of Solutions andMixtures Chromatography • Solubility • Spectroscopy and the Electromagnetic Spectrum • Photoelectric Effect • Beer-Lambert Law
4	Chemical Reactions	18	• Introduction for Reactions • Net Ionic Equations • Representations of Reactions • Physical and Chemical Changes • Stoichiometry • Introduction to Titration • Types of Chemical Reactions • Introduction to Acid-Base Reactions • Oxidation-Reduction (Redox) Reactions
5	Kinetics	15	• Reaction Rates • Introduction to Rate Law • Concentration Changes Over Time • Elementary Reactions • Collision Model • Reaction Energy Profile • Introduction to Reaction Mechanisms • Reaction Mechanism and Rate Law • Steady-State Approximation • Multistep Reaction Energy Profile • Catalysis
6	Thermodynamics	15	• Endothermic and Exothermic Processes • Energy Diagrams • Heat Transfer and Thermal Equilibrium

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			• Heat Capacity and Calorimetry • Energy of Phase Changes • Introduction to Enthalpy of Reaction • Bond Enthalpies • Enthalpy of Formation • Hess's Law
7	Equilibrium	20	• Introduction to Equilibrium • Direction of Reversible Reactions • Reaction Quotient and Equilibrium Constant • Calculating the Equilibrium Constant • Magnitude of the Equilibrium Constant • Properties of the Equilibrium Constant • Calculating Equilibrium Concentrations • Representation of Equilibrium • Introduction to LeChatelier's Principle • Reaction Quotient and LeChatelier's Principle • Introduction to Solubility Equilibria • Common-Ion Effect • pH and Solubility • Free Energy of Dissolution
8	Acids and Bases	20	• Introduction to Acids and Bases • pH and pOH of Strong Acids and Bases • Weak Acid and Base Equilibria • Acid-Base Reactions and Buffers • Acid-Base Titrations • Molecular Structure of Acids and Bases • pH and pKa • Properties of Buffers • Henderson-Hasselbalch Equation • Buffer Capacity
9	Applications of Thermodynamics	15	• Introduction to Entropy • Absolute Entropy and Entropy Change • Gibbs Free Energy and Thermodynamic Favorability • Thermodynamic and Kinetic Control • Free Energy and Equilibrium • Coupled Reactions • Galvanic (Voltaic) and Electrolytic Cells • Cell Potential and Free Energy • Cell Potential Under Nonstandard Conditions • Electrolysis and Faraday's Law

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AP Environmental Science			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
0	Intro to APES (chapters 1 & 2)	10	This is an introductory unit where class organization and unit design are explored.
1	The Living World: Ecosystems	14-15	• 1.1 - Introduction to Ecosystems • 1.2 - Terrestrial Biomes • 1.3 - Aquatic Biomes • 1.4 - The Carbon Cycle • 1.5 - The Nitrogen Cycle • 1.6 - The Phosphorus Cycle • 1.7 - The Hydrologic (Water) Cycle • 1.8 - Primary Productivity • 1.9 - Trophic Levels • 1.10 - Energy Flow and the 10% Rule • 1.11 - Food Chains and Food Webs
2	The Living World: Biodiversity	11-12	• 2.1 - Introduction to Biodiversity • 2.2 - Ecosystem Services • 2.3 - Island Biogeography • 2.4 - Ecological Tolerance • 2.5 - Natural Disruptions to Ecosystems • 2.6 - Adaptations • 2.7 - Ecological Succession
3	Populations	12-13	• 3.1 - Generalist and Specialist Species • 3.2 - K-Selected r-Selected Species • 3.3 - Survivorship Curves • 3.4 - Carrying Capacity • 3.5 - Population Growth and Resource Availability • 3.6 - Age Structure Diagrams • 3.7 - Total Fertility Rate • 3.8 - Human Population Dynamics • 3.9 - Demographic Transition
4	Earth Systems and Resources	11-12	• 4.1 - Plate Tectonics • 4.2 - Soil Formation and Erosion • 4.3 - Soil Composition and Properties • 4.4 - Earth's Atmosphere • 4.5 - Global Wind Patterns • 4.6 - Watersheds • 4.7 - Solar Radiation and Earth's Seasons • 4.8 - Earth's Geography and Climate • 4.9 - El Niño and La Niña

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5	Land and Water Use	18-19	• 5.1 - The Tragedy of the Commons • 5.2 - Clearcutting • 5.3 - The Green Revolution • 5.4 - Impacts of Agricultural Practices • 5.5 - Irrigation Methods • 5.6 - Pest Control Methods • 5.7 - Meat Production Methods • 5.8 - Impacts of Overfishing • 5.9 - Impacts of Mining • 5.10 - Impacts of Urbanization • 5.11 - Ecological Footprints • 5.12 - Introduction to Sustainability • 5.13 - Methods to Reduce Urban Runoff • 5.14 - Integrated Pest Management • 5.15 - Sustainable Agriculture • 5.16 - Aquaculture • 5.17 - Sustainable Forestry
6	Energy Resources and Consumption	16-17	• 6.1 - Renewable and Nonrenewable Resources • 6.2 - Global Energy Consumption • 6.3 - Fuel Types and Uses • 6.4 - Distribution of Natural Energy Resources • 6.5 - Fossil Fuels • 6.6 - Nuclear Power • 6.7 - Energy from Biomass • 6.8 - Solar Energy • 6.9 - Hydroelectric Power • 6.10 - Geothermal Energy • 6.11 - Hydrogen Fuel Cell • 6.12 - Wind Energy • 6.13 - Energy Conservation
7	Atmospheric Pollution	11-12	• 7.1 - Introduction to Air Pollution • 7.2 - Photochemical Smog • 7.3 - Thermal Inversion • 7.4 - Atmospheric CO2 and Particulates • 7.5 - Indoor Air Pollutants • 7.6 - Reduction of Air Pollutants • 7.7 - Acid Rain • 7.8 - Noise Pollution
8	Aquatic and Terrestrial Pollution	19-20	• 8.1 - Sources of Pollution • 8.2 - Human Impacts on Ecosystems • 8.3 - Endocrine Disruptors • 8.4 - Human Impacts on Wetlands and Mangroves • 8.5 - Eutrophication • 8.6 - Thermal Pollution • 8.7 - Persistent Organic Pollutants (POPs)

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			• 8.8 - Bioaccumulation and Biomagnification STB • 8.9 - Solid Waste Disposal • 8.10 - Waste Reduction Methods • 8.11 - Sewage Treatment • 8.12 - Lethal Dose 50% (LD50) • 8.13 - Dose Response Curve • 8.14 - Pollution and Human Health • 8.15 - Pathogens and Infectious Diseases
9	Global Change	19-20	• 9.1 - Stratospheric Ozone Depletion • 9.2 - Reducing Ozone Depletion • 9.3 - The Greenhouse Effect • 9.4 - Increases in the Greenhouse Gases • 9.5 - Global Climate Change • 9.6 - Ocean Warming • 9.7 - Ocean Acidification • 9.8 - Invasive Species • 9.9 - Endangered Species • 9.10 - Human Impacts on Biodiversity

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AP Physics 1			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Kinematics is 1D		• Problem Solving Strategies • Graphing Review • Distance vs. Displacement • Speed and velocity • Acceleration • Free-fall acceleration • Motion Graphs
2	Kinematics in 2D		• Graphical Addition of Vectors • Analytical Addition of Vectors • Projectile Motion • Relative Velocity
3	Newton's Laws of Motion		• Forces and Force Diagrams • Newton's First Law of Motion • Newton's 2nd Law of Motion • Newton's 3rd Law of Motion • Weight vs. Mass • Inclined Planes • Friction
4	Circular Motion and		• Centripetal Acceleration and Forces

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	Gravitation		• Banked Curves • Newton's Universal Law of Gravitation • Kepler's Laws of Planetary Motion
5	Work, Power, and Energy		• Work and Power • Energy forms • Work-Energy Principle • Law of Conservation of Energy
6	Linear Momentum		• Momentum • Impulse - Momentum Theorem • Law of Conservation of Momentum • Energy in Momentum • Conservation of Momentum in 2D
7	Rotational Motion and Static Equilibrium		• Angular Quantities • Angular vs. Linear Quantities and properties • Torque • Moment of Inertia • Rotational Energy • Angular Momentum • Law of Conservation of Rotational Momentum • Static Equilibrium
8	Waves and Sound		• Simple Harmonic Motion • Waves Characteristics and Wave Interactions • Sound • Doppler Shift • Wind and String Instruments

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AP Physics 2			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Review of Kinematics		• 1D Motion • 2D Motion • Newton's Laws of Motion • Energy • Momentum • Newton's Universal Law of Gravity
2	Fluids		• Pressure • Density • Buoyancy

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			• Archimedes' Principle • Pascal's Principle • Bernoulli's Principle • Viscosity • Surface Tension
3	Thermodynamics		• Temperature and Absolute Temperature • Thermal Expansion • Kinetic Theory of Gases • Ideal Gas Laws • Heat and Energy Transfer • Calorimetry • Thermodynamic Laws • Thermodynamic Processes and Cycles • Heat Engines and Efficiency • Heat Pumps, Refrigerators, and A/C
4	Electrostatics		• Electric Charge • Polarization • Charging by Conduction and Induction • Coulomb's Law • Electric Fields • Electric Potential • Capacitance
5	DC Circuits		• AC Current vs. DC Current • Electrical Power • Resistance • Ohm's Law • Series Circuits • Parallel Circuits • Complex Circuits • Kirchhoff's Laws • RC Circuits
6	Magnetism		• Magnets • Magnetic Fields • Magnetic Force • Electromagnetic Induction • Motors and Generators • AC Circuits and magnetism • Transformers
7	Light and Optics		• Speed of Light • Electromagnetic Spectrum • Reflection • Mirrors • Refraction • Snell's Law • Ray Diagrams • Lenses

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			• The Human Eye • Diffraction • Interference • Polarization • Doppler Effect
8	Atomic and Nuclear Physics		• Photoelectric Effect • Quantum Mechanics • Photon Interactions • Relativity • Hydrogen Energy Levels • Wave Particle Duality • deBroglie's Hypothesis • Heisenberg Uncertainty Principle • Planck's Constant • Radiation • Half Life and Nuclear Decay • Nuclear Energy

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Social Studies - Class Scope and Sequences

Requirements and Classes: Each student needs at least 2.5 credits (years) for graduation.		
Human Geography (1 year) OR AP Human Geography (1 year)	US History (1 year) OR AP US History (1 year)	Government (Semester) OR AP Government (1 year)
Human Geography - Instructional (1 year)	US History - Instructional (1 year)	Government - Instructional (Semester)

Electives: Can be taken concurrently with required Social Science classes depending on the grade level				
Ancient World History (Semester)	Modern World History (Semester)	History of Armed Conflict (Semester)	Psychology (Semester) OR AP Psychology (1 year)	Sociology (Semester)

Advanced Placement Options		
AP Human Geography	AP US History	AP Government and Politics
AP Psychology		

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Human Geography			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Spatial Organization of Our World	21	• 5 Themes of Geography • Map Reading and Map Distortion • GIS • Remote Sensing • Thematic Maps
2	Weather, Climate and the Human Response to Natural and Man-Made Disasters	32	• Weather and Climate • Causes of Weather • World Climate Regions • Human Response to Man Made Climate/Human Disasters
3	Population and Migration	20	• Migration Patterns • Push/Pull Factors • Developed and Developing Countries • Challenges with Population Growth • Legal and Illegal Migration
4	Culture	19	• Culture Traits • Culture Hearths • Culture Regions • World Religions • Cultural Diffusion • Cultural Barriers • Folk and Pop Culture
5	Political Geography and Conflict	33	• Political Systems • Ethnic Differences • Nationalism • Cold War • UN/NATO • Former Yugoslavia • War in Ukraine • Kashmir and Israeli Conflicts • Apartheid • GENOCIDE - Rwandan, Armenian, Holocaust, Cambodian, Bosnian and Sudanese
6	Economics and Industry	15	• Outsourcing • Globalization • Communism, Socialism and Capitalism • Market Systems

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			• Trade
7	Urban Geography	20	• Spatial Patterns in Urban Regions • Spatial Patterns in Suburbia Regions • Spatial Patterns in Rural Regions • How Cities are becoming “Green”?

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AP Human Geography			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Thinking Geographically		• 1.1 Introduction to Maps • 1.2 Geographic Data • 1.3 The Power of Geographic Data • 1.4 Spatial Concepts • 1.5 Human–Environmental Interaction • 1.6 Scales of Analysis • 1.7 Regional Analysis
2	Population and Migration Patterns and Processes		• 2.1 Population Distribution • 2.2 Consequences of Population Distribution • 2.3 Population Composition • 2.4 Population Dynamics • 2.5 The Demographic Transition Model • 2.6 Malthusian Theory • 2.7 Population Policies • 2.8 Women and Demographic Change • 2.9 Aging Populations • 2.10 Causes of Migration • 2.11 Forced and Voluntary Migration • 2.12 Effects of Migration
3	Cultural Patterns and Processes		• 3.1 Introduction to Culture • 3.2 Cultural Landscapes • 3.3 Cultural Patterns • 3.4 Types of Diffusion • 3.5 Historical Causes of Diffusion • 3.6 Contemporary Causes of Diffusion • 3.7 Diffusion of Religion and Language • 3.8 Effects of Diffusion
4	Political Patterns and Processes		• 4.1 Introduction to Political Geography • 4.2 Political Processes • 4.3 Political Power and Territoriality • 4.4 Defining Political Boundaries • 4.5 The Function of Political Boundaries • 4.6 Internal Boundaries

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			• 4.7 Forms of Governance • 4.8 Defining Devolutionary Factors • 4.9 Challenges to Sovereignty • 4.10 Consequences of Centrifugal and Centripetal Forces
5	Agriculture and Rural Land-Use Patterns and Processes		• 5.1 Introduction to Agriculture • 5.2 Settlement Patterns and Survey Methods • 5.3 Agricultural Origins and Diffusions • 5.4 The Second Agricultural Revolution • 5.5 The Green Revolution • 5.6 Agricultural Production Regions • 5.7 Spatial Organization of Agriculture • 5.8 Von Thünen Model • 5.9 The Global System of Agriculture • 5.10 Consequences of Agricultural Practices • 5.11 Challenges of Contemporary Agriculture • 5.12 Women in Agriculture
6	Cities and Urban Land-Use Patterns and Processes		• 6.1 The Origin and Influences of Urbanization • 6.2 Cities Across the World • 6.3 Cities and Globalization • 6.4 The Size and Distribution of Cities • 6.5 The Internal Structure of Cities • 6.6 Density and Land Use • 6.7 Infrastructure • 6.8 Urban Sustainability • 6.9 Urban Data • 6.10 Challenges of Urban Changes • 6.11 Challenges of Urban Sustainability
7	Industrial and Economic Development Patterns and Processes		• 7.1 The Industrial Revolution • 7.2 Economic Sectors and Patterns • 7.3 Measures of Development • 7.4 Women and Economic Development • 7.5 Theories of Development • 7.6 Trade and the World Economy • 7.7 Changes as a Result of the World Economy • 7.8 Sustainable Development

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Human Geography - Instructional			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Spatial Organization of Our World		• 5 Themes of Geography • Map Reading and Map Distortion • GIS • Remote Sensing • Thematic Maps
2	Weather, Climate and the Human Response to Natural and Man-Made Disasters		• Weather and Climate • Causes of Weather • World Climate Regions • Human Response to Man Made Climate/Human Disasters
3	Population and Migration		• Migration Patterns • Push/Pull Factors • Developed and Developing Countries • Challenges with Population Growth • Legal and Illegal Migration
4	Culture		• Culture Traits • Culture Hearths • Culture Regions • World Religions • Cultural Diffusion • Cultural Barriers • Folk and Pop Culture
5	Political Geography and Conflict		• Political Systems • Ethnic Differences • Nationalism • Cold War • UN/NATO • Former Yugoslavia • War in Ukraine • Kashmir and Israeli Conflicts • Apartheid • GENOCIDE - Rwandan, Armenian, Holocaust, Cambodian, Bosnian and Sudanese
6	Economics and Industry		• Outsourcing • Globalization • Communism, Socialism and Capitalism • Market Systems

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			• Trade
7	Urban Geography		• Spatial Patterns in Urban Regions • Spatial Patterns in Suburbia Regions • Spatial Patterns in Rural Regions • How Cities are becoming “Green”?

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U.S. History			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Early America	24	• Colonizing Countries • Reasons for Colonization • Jamestown and Plymouth • Founding of the 13 colonies • Economies/Culture of Colonial Regions • French and Indian War • Causes of American Revolution • Declaration of Independence • Impactful figures in the Revolution • Significant Battles and Events • Washington, Adams, and Jefferson Presidencies • Federalists and Republicans
2	American Expansionism and Imperialism	16	• Manifest Destiny • Louisiana Purchase • Monroe Doctrine • Indian Removal Act • Texas War for Independence • Mexican American War • Spanish American War • Imperialism
3	America in Conflict (Civil War, WWI, WWII, Cold War and Vietnam)	35	**Civil War** • Events leading to Civil War • Significant Civil War Battles • Strategies and Goals of Union and Confederacy • Confederacy surrender and Lincoln’s Assassination **WWI** • Causes of WWI • Causes of US Involvement and impact on US • Lasting effects of WWI **WWII** • Causes of WWII • Causes of US Involvement and impact on US • Impactful leaders and Battles

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			• Allied strategies in the Atlantic and Pacific theaters • Jewish Persecution and the Holocaust **Cold War** • Compare Democracy and Communism • Policy of Containment • Red Scare • Marshall Plan, NATO, and Warsaw Pact • Cuban Missile Crisis • Events of Vietnam
4	Immigration	14	• Comparing Different Immigrants Groups • Difficulties and Prejudice faced by Immigrants (Irish, Chinese, Jewish) • Immigrants Living Conditions • Impact on Economy • Nativism • Immigration Laws
5	Struggle for Equality and Civil Rights	24	• Major Programs of Reconstruction • Failure of Reconstruction • Black Codes and Segregation • Women's Equality Movement • Progressive Movement • Great Depression • New Deal • Key Events of Civil Rights Movement • JFK and LBJ's policies • Great Society • Other advancements of rights for Americans • Effectiveness of Civil Rights Leaders
6	Science and Technology	23	• Major modes of Transportation and effects on economy • Railroads • Advancements by Ford, Carnegie, Edison, Tesla, etc. • Highways • Levittowns and Capitalism • Impact on Environment • Impact on Society
7	Pop Culture	24	• Harlem Renaissance • Prohibition and Organized Crime • 1920's Youth Culture • Political Scandals • Advertising and Consumerism • Radio • Television and family stereotypes • Sports Impact on American Identity • Movies

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			• Music's Influence on Social Issues

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U.S. History - Instructional			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Early America		• Colonizing Countries • Reasons for Colonization • Jamestown and Plymouth • Founding of the 13 colonies • Economies/Culture of Colonial Regions • French and Indian War • Causes of American Revolution • Declaration of Independence • Impactful figures in the Revolution • Significant Battles and Events • Washington, Adams, and Jefferson Presidencies • Federalists and Republicans
2	American Expansionism and Imperialism		• Manifest Destiny • Louisiana Purchase • Monroe Doctrine • Indian Removal Act • Texas War for Independence • Mexican American War • Spanish American War • Imperialism
3	America in Conflict (Civil War, WWI, WWII, Cold War and Vietnam)		**Civil War** • Events leading to Civil War • Significant Civil War Battles • Strategies and Goals of Union and Confederacy • Confederacy surrender and Lincoln's Assassination **WWI** • Causes of WWI • Causes of US Involvement and impact on US • Lasting effects of WWI **WWII** • Causes of WWII • Causes of US Involvement and impact on US • Impactful leaders and Battles • Allied strategies in the Atlantic and Pacific theaters • Jewish Persecution and the Holocaust **Cold War** • Compare Democracy and Communism

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			• Policy of Containment • Red Scare • Marshall Plan, NATO, and Warsaw Pact • Cuban Missile Crisis • Events of Vietnam
4	Immigration		• Comparing Different Immigrants Groups • Difficulties and Prejudice faced by Immigrants (Irish, Chinese, Jewish) • Immigrants Living Conditions • Impact on Economy • Nativism • Immigration Laws
5	Struggle for Equality and Civil Rights		• Major Programs of Reconstruction • Failure of Reconstruction • Black Codes and Segregation • Women's Equality Movement • Progressive Movement • Great Depression • New Deal • Key Events of Civil Rights Movement • JFK and LBJ's policies • Great Society • Other advancements of rights for Americans • Effectiveness of Civil Rights Leaders
6	Science and Technology		• Major modes of Transportation and effects on economy • Railroads • Advancements by Ford, Carnegie, Edison, Tesla, etc. • Highways • Levittowns and Capitalism • Impact on Environment • Impact on Society
7	Pop Culture		• Harlem Renaissance • Prohibition and Organized Crime • 1920's Youth Culture • Political Scandals • Advertising and Consumerism • Radio • Television and family stereotypes • Sports Impact on American Identity • Movies • Music's Influence on Social Issues

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Advanced Placement U.S. History			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Historical Periods 1 & 2: Pre-Contact America to French and Indian War	14	• 1.1 - Contextualizing Period 1 • 1.2 - Native American Societies Before European Contact • 1.3 - European Exploration in the Americas • 1.4 - Columbian Exchange, Spanish Exploration, and Conquest • 1.5 - Labor, Slavery, and Caste in the Spanish Colonial System • 1.6 - Cultural Interactions Between Europeans, Native Americans, and Africans • 1.7 - Causation in Period 1 • 2.1 - Contextualizing Period 2 • 2.2 - European Colonization • 2.3 - The Regions of British Colonies • 2.4 - Transatlantic Trade • 2.5 - Interactions Between American Indians and Europeans • 2.6 - Slavery in the British Colonies • 2.7 - Colonial Society and Culture • 2.8 - Comparison in Period 2
2	Historical Period 3: French and Indian War to 1800	15	• 3.1 - Contextualizing Period 3 • 3.2 - Seven Years' War (The French and Indian War) • 3.3 - Taxation Without Representation • 3.4 - Philosophical Foundations of the American Revolution • 3.5 - The American Revolution • 3.6 - The Influence of Revolutionary Ideals • 3.7 - Articles of Confederation • 3.8 - The Constitutional Convention and Debates over Ratification • 3.9 - Constitution • 3.10 - Shaping a New Republic • 3.11 - Developing an American Identity • 3.12 - Movement in the Early Republic • 3.13 - Continuity and Change in Period 3
3	Historical Period 4: Jefferson's Presidency to End of Mexican-American War	21	• 4.1 - Contextualizing Period 4 • 4.2 - The Rise of Political Parties and the Era of Jefferson • 4.3 - Politics and Regional Interests • 4.4 - America on the World Stage • 4.5 - Market Revolution - Industrialization

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			• 4.6 - Market Revolution - Society and Culture • 4.7 - Expanding Democracy • 4.8 - Jackson and Federal Power • 4.9 - The Development of an American Culture • 4.10 - Second Great Awakening • 4.11 - An Age of Reform • 4.12 - African Americans in the Early Republic • 4.13 - The Society of the South in the Early Republic • 4.14 - Causation in Period 4
4	Historical Period 5: Mexican-American War to End of Reconstruction	18	• 5.1 - Contextualizing Period 5 • 5.2 - Manifest Destiny • 5.3 - Mexican–American War • 5.4 - Compromise of 1850 • 5.5 - Sectional Conflict - Regional Differences • 5.6 - Failure of Compromise • 5.7 - Election of 1860 and Secession • 5.8 - Military Conflict in the Civil War • 5.9 - Government Policies During the Civil War • 5.10 - Reconstruction • 5.11 - Failure of Reconstruction • 5.12 - Comparison in Period 5
5	Historical Period 6: Expanding Westward to the Gilded Age	11	• 6.1 - Contextualizing Period 6 • 6.2 - Westward Expansion - Economic Development • 6.3 - Westward Expansion - Social and Cultural Development • 6.4 - The “New South” • 6.5 - Technological Innovation • 6.6 - The Rise of Industrial Capitalism • 6.7 - Labor in the Gilded Age • 6.8 - Immigration and Migration in the Gilded Age • 6.9 - Responses to Immigration in the Gilded Age • 6.10 - Development of the Middle Class • 6.11 - Reform in the Gilded Age • 6.12 - Controversies over the Role of Government in the Gilded Age • 6.13 - Politics in the Gilded Age • 6.14 - Continuity and Change in Period 6
6	Historical Period 7: Spanish American War to WWI	17	• 7.1 - Contextualizing Period 7 • 7.2 - Imperialism - Debates • 7.3 - Spanish–American War • 7.4 - The Progressives • 7.5 - World War I - Military and Diplomacy

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			• 7.6 - World War I - Home Front
7	Historical Period 7: 1920's to New Deal	15	• 7.7 - 1920s - Innovations in Communication and Technology • 7.8 - 1920s - Cultural and Political Controversies • 7.9 - Great Depression • 7.10 - New Deal • 7.11 - Interwar Foreign Policy
8	Historical Period 8: WWII to 1950's	19	• 7.12 - World War II - Mobilization • 7.13 - World War II - Military • 7.14 - Postwar Diplomacy • 7.15 - Comparison in Period 7 • 8.1 - Contextualizing Period 8 • 8.2 - The Cold War from 1945 to 1980 • 8.3 - The Red Scare • 8.4 - Economy after 1945 • 8.5 - Culture after 1945
9	Historical Period 8 and 9: Civil Rights Movement to the 21st Century	16	• 8.6 - Early Steps in the Civil Rights Movement (1940s and 1950s) • 8.7 - America as a World Power • 8.8 - Vietnam War • 8.9 - Great Society • 8.10 - The African American Civil Rights Movement (1960s) • 8.11 - The Civil Rights Movement Expands • 8.12 - Youth Culture of the 1960s • 8.13 - The Environment and Natural Resources from 1968 to 1980 • 8.14 - Society in Transition • 8.15 - Continuity and Change in Period 8 • 9.1 - Contextualizing Period 9 • 9.2 - Reagan and Conservatism • 9.3 - The End of the Cold War • 9.4 - A Changing Economy • 9.5 - Migration and Immigration in the 1990s and 2000s • 9.6 - Challenges of the 21st Century • 9.7 - Causation in Period 9

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Government			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Foundations		• Functions of government • Types of governments • Primary characteristics of American democracy • Federalism
2	Participation		• Political ideology • The two-party system • Electoral College • Gerrymandering
3	Liberty and Justice for All		• Individual liberties • Protections of and limitations to individual liberties
4	Institutions		• Three branches of government • Legislative process • US Constitution test • Illinois Constitution test

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Government - Instructional			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Foundations	30	• Functions of government • Types of governments • Primary characteristics of American democracy • Federalism • The two-party system • Political ideology

2	Branches of Government	40	• Congress/Legislative
			• Executive Branch
			  ○ Presidential powers
			• Judicial Branch
			  ○ Federal court system
			• US Constitution test

3	Illinois Government	10	• Three branches ○ Illinois executive branch qualifications and duties • Bill of Rights for Illinois

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			• Illinois history • Illinois Constitution test

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Advanced Placement Government and Politics			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Foundations of American Democracy		• 1.1 Ideals of Democracy • 1.2 Types of Democracy • 1.3 Government Power and Individual Rights • 1.4 Challenges of the Articles of Confederation • 1.5 Ratification of the U.S. Constitution • 1.6 Principles of American Government • 1.7 Relationship Between the States and National • 1.8 Constitutional Interpretations of Federalism • 1.9 Federalism in Action 5
2	Interactions Among Branches of Government		• 2.1 Congress: The Senate and the House of Representatives 2.2 Structures, Powers, and Functions of Congress • 2.3 Congressional Behavior • 2.4 Roles and Powers of the President • 2.5 Checks on the Presidency • 2.6 Expansion of Presidential Power • 2.7 Presidential Communication • 2.8 The Judicial Branch • 2.9 The Role of the Judicial Branch • 2.10 The Court in Action • 2.11 Checks on the Judicial Branch • 2.12 The Bureaucracy • 2.13 Discretionary and Rulemaking Authority • 2.14 Holding the Bureaucracy Accountable • 2.15 Policy and the Branches of Government
3	Civil Liberties and Civil Rights		• 3.1 The Bill of Rights • 3.2 First Amendment: Freedom of Religion • 3.3 First Amendment: Freedom of Speech • 3.4 First Amendment: Freedom of the Press • 3.5 Second Amendment: Right to Bear Arms • 3.6 Amendments: Balancing Individual Freedom with Public Order and Safety. • 3.7 Selective Incorporation • 3.8 Amendments: Due Process and the Rights of the Accused 3.9 Amendments: Due Process and the Right to Privacy • 3.10 Social Movements and Equal Protection

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4	American Political Ideologies and Beliefs		• 4.1 American Attitudes About Government and Politics • 4.2 Political Socialization • 4.3 Changes in Ideology • 4.4 Influence of Political Events on Ideology • 4.5 Measuring Public Opinion • 4.6 Evaluating Public Opinion Data • 4.7 Ideologies of Political Parties • 4.8 Ideology and Policy Making • 4.9 Ideology and Economic Policy • 4.10 Ideology and Social Policy
5	Political Participation		• 5.1 Voting Rights and Models of Voting Behavior • 5.2 Voter Turnout • 5.3 Political Parties • 5.4 How and Why Political Parties Change and Adapt • 5.5 Third-Party Politics • 5.6 Interest Groups Influencing Policy Making • 5.7 Groups Influencing Policy Outcomes • 5.8 Electing a President • 5.9 Congressional Elections • 5.10 Modern Campaigns • 5.11 Campaign Finance • 5.12 The Media • 5.13 Changing Media

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Ancient World History			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Early Civilizations		• Neanderthals/Cromagnans/Homo Sapiens • Paleolithic Age • Neolithic Age • Mesopotamia • Hammurabi's Code • 6 Characteristics of Civilization • Egypt
2	Ancient India / Ancient China		• Buddhism • Confucianism • Caste System • Silk Road • Chinese Dynasties • Chinese Inventions • Great Wall of China

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3	Ancient Greece		• Greek Gods • City States (Polises) • Thucydides / Herodotus • Greek Philosophers • Iliad/Odyssey • Governments (Sparta/Athens)
4	Ancient Rome		• Roman Republic • Roman Empire • Fall of the Roman Empire • Roman Emperors • Roman Contributions • Rise of Christianity • Roman Culture and Society (Gladiators)
5	The Islamic World		• Muhammad • Spread of Islam • 5 Pillars of Islam • Comparing Christianity/Islam/Judaism • Islamic Culture

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Modern World History			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Explorers/Ottoman Empire		• Explorers Project • Suleyman the Magnificent • Muslim Empires Timeline
2	Revolution and Enlightenment		• Enlightenment Timeline • Enlightenment Project • Enlightenment Video • Why did the Enlightenment happen and what is its importance?
3	French Revolution		• The French Revolution in 10 pictures • Napoleon and his impact on France • Impact of the French Revolution in Europe • Compare/Contrast the American and French Revolutions
4	Industrial Revolution		• Industrial Revolution Inventors • Inventions of the Industrial Revolution • Child Labor during the Industrial Revolution
5	World War I		• WWI Timeline • WWI Presentation

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			• WWI and its aftermath

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History of Armed Conflict			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Theory & Makeup of Warfare		• Ranks, troop formations, branches of service, and military technology • Carl von Clausewitz's Trinity of War • Why American high schoolers should study war
2	Ancient Warfare		• Greco-Persian Wars • Punic Wars • Mongols vs. Samurais
3	Victory Disease		• Westward Expansion/Little Bighorn • Anglo-Zulu Wars • Battle of Mogadishu (Black Hawk Down)
4	Amphibious Warfare		• Gallipoli • Guadalcanal • Tarawa • Peleliu • Iwo Jima • Inchon (Korean War) • Falklands
5	Vietnam		• Containment Theory • Domino Effect Theory • American vs. Vietnamese Technology • JFK, LBJ, Nixon, Kissinger • Viet Cong • Tet Offensive • Fall of Saigon
6	War on Terror		• Operation Desert Storm • Powell Doctrine • Saddam Hussein • Al-Qaeda, Osama Bin Laden • 9/11 • OEF • OIF • George W. Bush • WMD's

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Psychology			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Intro to Psychology		• Schools of Psychology • Types of Psychologists • Psychological Experiments • APA Ethics • Milgram Experiment
2	Biological Psychology		• Neurons • Neurotransmitters • Parts of the Brain • Nervous System Disorders • Nature vs. Nurture • Dream Analysis
3	Developmental Psychology		• Cognitive Development • Parenting Styles • Psychosocial Development • Moral Development • Psychological Adjustment
4	Cognitive Psychology		• Classical Conditioning • Operant Conditioning • Observational Learning • Memory
5	Psychological Disorders		• Lobotomy • DSM Classification • Psychotherapy • Types of Psychological Disorders

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Advanced Placement Psychology			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Biological Bases of Behavior	25	1.1 Interaction of Heredity and Environment 1.2 Overview of the Nervous System 1.3 The Neuron and Neural Firing 1.4 The Brain 1.5 Sleep 1.6 Sensation
2	Cognition	25	2.1 Perception 2.2 Thinking, ProblemSolving, Judgments, and Decision-Making 2.3 Introduction to Memory 2.4 Encoding Memories 2.5 Storing Memories 2.6 Retrieving Memories 2.7 Forgetting and Other Memory Challenges 2.8 Intelligence and Achievement
3	Development and Learning	25	3.1 Themes and Methods in Developmental Psychology 3.2 Physical Development Across the Lifespan 3.3 Gender and Sexual Orientation 3.4 Cognitive Development Across the Lifespan 3.5 Communication and Language Development 3.6 Social-Emotional Development Across the Lifespan 3.7 Classical Conditioning 3.8 Operant Conditioning 3.9 Social, Cognitive, and Neurological Factors in Learning
4	Social Psychology and Personality	25	4.1 Attribution Theory and Person Perception 4.2 Attitude Formation and Attitude Change 4.3 Psychology of Social Situations 4.4 Psychodynamic and Humanistic Theories of Personality 4.5 Social-Cognitive and Trait Theories of Personality 4.6 Motivation 4.7 Emotion
5	Mental and Physical Health	25	5.1 Introduction to Health Psychology 5.2 Positive Psychology 5.3 Explaining and Classifying Psychological Disorders 5.4 Selection of Categories of Psychological Disorders

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			5.5 Treatment of Psychological Disorders

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Sociology			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Being a Sociologist		• History of Sociology • Major Sociologists • Three theoretical perspectives
2	Culture and Religion		• Four components of culture • Sociological purpose of religion • Positive and negative impacts of religion
3	Stratification		• Common patterns of social inequality • Impact of social inequality on groups • Responses to social inequality
4	Socialization		• Four primary agents of socialization • Impact of agents of socialization on the individual and on groups

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World Languages - Class Scope and Sequences

Classes:	
Spanish	**French**
Spanish 1	French 1
Spanish 2	French 2
Spanish 3	French 3
Spanish 4	

Advanced Placement Options	
AP Spanish Language and Culture	AP French Language and Culture

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Spanish 1			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Pre U	36	• Introductions, numbers, calendar & alphabet • Spanish Speaking Countries
2	U1	36	• Identities and preferred activities • Paraguay • 'To be' • yes/no questions
3	U2	36	• School life - subjects, places & people • Costa Rica • Gender & number • definite articles • subject pronouns • -ar verbs
4	U3	36	• Family - people, descriptions & the home • Spain • Adjective agreement • -er & -ir verbs
5	U4	36	• Food - items, descriptions & ordering • Mexico • Stem changing verbs • Gustar • Ser / estar with adjectives

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Spanish 2			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	U1	45	• School life - school subjects, people, descriptions and activities • Ecuador • Regular verbs in the present tense • Stem changing verbs in the present tense • Gustar • Expressing obligation (tener que / hay que)
2	U2	45	• Family life - family members, descriptions and activities

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			• Mexico
			• Comparisons & superlatives
			• Reflexive verbs
			• The imperfect past tense
			  ○ Regular
			  ○ Ser, ir, ver

3	U3	45	• Novel, Robo en la noche - A teen's adventures in Costa Rica

4	U4	45	• Unidad 3 Entreculturas
			• Community - places and descriptions
			• Nicaragua
			• The preterite past tense
			  ○ Regular
			  ○ Ir y ser
			  ○ Car/gar/zar verbs
			• Saber y conocer
			• Commands

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Spanish 3			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Entreculturas 2 Unit 4 Te acuerdas	60	• Food and related vocabulary • Present tense • Ser/estar • Commands • Cuba
2	Entreculturas 2 Unit 4	30	• Food and related vocabulary • Direct object pronouns • Commands • The Caribbean
3	*Hasta la sepultura*	60	• Spain • Preterite forms • Imperfect forms • Usage of Preterite and Imperfect • Vocabulary related to novel
4	Subjunctive	30	• Formation of subjunctive • Usage of subjunctive • Body parts & clothing vocabulary • Weather expressions

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Spanish 4			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Bajo la Mesa	30	• Future Tense • Conditional Tense • Vocabulary related to art
2	Dame Dame Chocolate	30	• Present Subjunctive • Vocabulary relating to the production of producing products sustainably • Vocabulary relating to fair trade and working conditions
3	La Hija del Sastre	30	• Spanish Civil War
4	Viaja Conmigo	30	• Imperfect Subjunctive • Vocabulary relating to travel
5	Compra Menos y Haz que Dure	30	• Present, Pluperfect, Future & Conditional Tenses • Vocabulary relating to recycling
6	Vida y Muerte	30	• Preterite/Imperfect • Influence of the Mara Salvatrucha in the US and in El Salvador

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Advanced Placement Spanish Language & Culture			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Families in Different Societies	40	• Celebration of the Tomatina • Traditions and customs of families in our own culture and those in Hispanic families • Challenges in the Spanish speaking world • Vocabulary relating to families & world challenges
2	The Influence of Language and Culture on Identity	30	• Latin American Spooky Legends • Advantages of being bilingual • Short story *Cajas De Cartón*
3	Influences of	30	• Vocabulary relating to beauty and health

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	Beauty and Art		• Famous Hispanic artists from around the world • Short story *El Décimo.* • The Spanish Christmas lottery - El Gordo
4	La Guerra Sucia	35	• The Dirty War in Argentina • Fluency Matters reader *La Guerra Sucia.*
5	AP Test Prep	35	• Living in a Spanish speaking country • Traveling in a Spanish speaking country • 6 parts of the AP test • Important vocabulary relating to the AP test

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French 1			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
0	Preliminary unit	13 days	• Introductions • Numbers • Dates & Holidays • Classroom commands • Francophone geography
1	Identity	40	• Talk about yourself • Interests • Backgrounds • ages • Expressing likes and dislikes • comparisons
2	School life	41	• Comparisons with Francophone schools • Tell time • Formulate questions • People, places & schedules • Express gender and number (def. & ind. articles) • Use regular verbs
3	Family & community	41	• Family & homelife • Describe people & pets • Describe relationships between people • Express possession (possessive adj.) • Formality • House furniture and shared spaces • Talk about cities/towns
4	Food	40	• Share preferences opinions and habits • Express quantities • Express actions in the negative

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			• Interpret a French menu • Create menus

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French 2			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	La rentrée	25	• school life
2	Les temps libre	25	• Leisure activities • Free time • sports/concerts • Express upcoming plans • Weekend plans • Weather
3	En ville	25	• Cities • Giving and understanding directions • Stores & shopping • Clothing weather and fashion • Groceries & food stores

4	Science-fiction : Parallèles	15	• Science-fiction
			  ○ Future
			  ○ Multiverse theory
			• Spoken French
			• Informal French

5	Au boulot, les bénévoles	25	• Inform people about volunteering • work/volunteer • Schedules • Chores • Verbs to express what people can/must/want to do • commands
6	A la table	35	• Imperfect tense • Reflexive verbs • Cooking terminology • Creating, accepting and declining invitations
7	Une ville qui bouge	30	• Passe compose • Paris • Making plans • What people do in cities • Tell people where you went and how you got

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French 3			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
0	Summer talk & Review	10-15	• Discuss summer activities • Review past tenses • Review of French I & II • Accents & their meanings
1	Des conseils pour une vie saine	37	• Health and wellness • Advice for peers • Healthcare • Doctor's office/medical terminology • Body parts
3	Voyager autrement	37	• Travel & Vacationing • Packing • Customs • Advice & recommendations • Formal & informal ways to ask for information
4	La seconde guerre mondiale	25	• WWII & it's effects on France • The resistance in France • French Film and propaganda • Au revoir les enfants
5	Art, beauty and aesthetics	35	• Music & its effects on society • Classic and contemporary French artists • Paintings and graffiti • Museums • Street art • Festivals • Litterature
6	Le petit prince	30	• Reading & Discussing • Finding themes in reading • Dissecting the philosophy in children's literature

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French 4/Advanced Placement French Language and Culture			
Unit #	**Unit Title**	**Estimated days**	**Topics Covered:**
1	Families in different societies	30	• Understanding the elements of a formal letter • Informal conversations • Crafting an email reply • Giving a presentation related to family and society
2	The influence of Language and Culture on Identity	30	• Interpreting audio recordings and interviews • Drawing connections between texts and their larger cultural context • Justifying ideas and opinions in writing • Giving a presentation comparing French cultural concepts to familiar ones
3	Influences of Beauty and Art	30	• Virtual museum field trips • Interpreting classic texts • Understanding what is included in the format of typical letters and interpreting their meaning • Replying to emails • Giving a presentation on art and French-speaking culture
4	How Science and Technology Affect Our Lives	30	• Reading articles about technological advances • Understanding the uses and dangers of AI • Following written and verbal instructions • Writing essays and citing sources • Giving a presentation on the impacts of scientific and technological developments
5	Factors That Impact the Quality of Life	30	• Connecting literary texts to larger cultural topics • Identifying perspective, tone, and attitude in a conversation • Understanding and following recipes and instructions • Using idioms and expressions • Giving advice • Giving a presentation comparing cultures and daily life
6	Environmental, Political, and Societal Challenges	31	• Analyzing articles, charts, and infographics on environmental changes • Listening for connections and meaning in audio reports • Making cultural connections among presentations • Writing essays to address global issues and suggest solutions

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			• Giving a presentation on global challenges

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