Stark County #100
Essential Skills Curriculum Map

High School

Organized by subject

K -12 PE Goals & Essential Skills

The Stark County District 100 K-12 Physical Education goal is to have students graduate Stark County school district with the ability to stay active in their lifestyle. When the students graduate and make their way through life they will have knowledge and experiences that allow them to stay active and healthy. We believe that the first thing that stops for graduates is their fitness and activity levels.

Essential Skills for Stark County K - 12 Physical Education

1. Acquire movement and motor skills and understand concepts necessary to engage in moderate to vigorous physical activity.
2. Achieve and maintain a health-enhancing level of physical fitness based upon continual self-assessment.
3. Develop skills necessary to become a successful member of a team or work force as a team by working with others during physical activity.
4. Understand principles of health promotion and the prevention and treatment of illness and injury.
5. Understand human body systems and factors that influence growth and development.
6. Promote and enhance health and well-being through the use of effective communication and decision making skills.

Mathematics

Standards for Mathematical Practice: Throughout the semester these standards will be continually reinforced:

1. Make sense of problems and persevere in solving them;
2. Construct viable arguments and critique the reasoning of others;
3. Reason abstractly and quantitatively;
4. Model with mathematics;
5. Attend to precision;
6. Use appropriate tools strategically;
7. Look for and make use of structure;
8. Look for and express regularity in repeated reasoning

Algebra I

Quarter 1	● Variables, Functions Patterns, & Graphs ● Rational Numbers ● Solving Equations
Quarter 2	● Solving Inequalities ● Graphs & Functions ● Linear Equations & Their Graphs

Quarter 3	• Systems of Equations & Inequalities • Exponents & Exponential Functions • Polynomials & Factoring
Quarter 4	• Quadratic Equations & Functions • Radical Expressions & Equations • Rational Expressions & Functions

Geometry

Quarter 1	• Tools of Geometry - Using inductive reasoning - Identifying the properties of the coordinate plane, points, lines & planes. • Reasoning & Proof - Identifying conditional statements & their components and converses. - Understanding the basic construction of a geometric proof. • Parallel & Perpendicular Lines - Understanding relationships between parallel lines and transversals - Using angle measures to make conclusions about line relationships - Identifying qualities of perpendicular intersections
Quarter 2	• Congruent Triangles - Identifying qualities of congruent triangles. - Comparing components of triangles to analyze congruency. • Relationships Within Triangles - Using ratios to find unknown quantities of triangles. • Quadrilaterals - Identifying similarities and differences in quadrilaterals.
Quarter 3	• Similarity - Understanding qualities of similar figures. - Solving unknowns in similar figures. • Right Triangles & Trigonometry - Identifying components of right triangles. - Understanding the relationships within right triangles. - Using trigonometric ratios to solve for unknown values. • Transformations - Using transformations on the coordinate plane
Quarter 4	• Area - Understanding the relationship between relationships between dimension lengths and area. • Surface Area & Volume - Finding surface area and volume of three dimensional figures. • Circles

	- Identifying qualities and components of circles. - Using relationships within circles to solve for unknown values.

Algebra II

Quarter 1	● Use property of numbers to solve equations, equalities, and absolute value equations ● Model, apply, and solve equations using real world scenarios ● Be able to represent functions in linear graph form ● Apply and understand parts of linear functions and how they affect graphs ● Able to solve linear systems to find three variable
Quarter 2	● Represent and solve a system of linear equations using a matrix ● Be able to foil and unfoil quadratic equations ● Apply properties of quadratics to parabolas ● Be able to extend knowledge of real properties of quadratics to complex and imaginary solutions
Quarter 3	● Understand polynomial theorems and how to use them to solve for real and complex solutions ● Use the binomial theorem to solve polynomials above ● Understand number theory to simplify radical expressions ● Simplify expressions using math operations ● Understand the relationship between radicals and exponents and how to convert between the two
Quarter 4	● Understand and apply rational expressions, equations, and functions ● Apply understanding of parabolas from earlier in the year to other conic sections and how they have similarities and differences ● Introduction to trig properties and unit circle - Be able to understand and convert between radian and degrees and understand and apply the difference between the two ● Apply number properties to series and sequences of numbers

Math/PreCalculus

Quarter 1	● Analyze the twelve basic function models & relate them to their properties; ● Build functions to solve problems, including composite & inverse functions as well as parametric relations; ● Use graphical transformations of function models to solve problems;
Quarter 2	● Interpret or create numeric, algebraic, & graphic models for linear & quadratic functions; ● Interpret or create numeric, algebraic, & graphic models for power functions & polynomial functions; ● Use function models to solve applied problems.

Quarter 3	• Solve polynomial functions of varying degrees for real & complex zeros; • Use algebraic or graphic models of rational functions to solve problems with rational equations; • Interpret or create numeric, algebraic, & graphical models of exponential, logistic, & logarithmic functions; • Solve inequalities in one variable by using sign charts.
Quarter 4	• Use matrices (and vectors) to solve problems • Solve systems of inequalities in two variables, including linear programming problems; • Interpret or create algebraic & graphical models of conic sections, including circles, ellipses, parabolas, & hyperbolas; • Relate graphical transformations of conic sections to their algebraic models.

Math/Statistics

Quarter 1	• Interpret Categorical & Quantitative Data • Summarize, represent, and interpret data on a single count or measurement variable • Summarize, represent, and interpret data on two categorical and quantitative variables • Interpret linear models • Make Inferences & Justifying Conclusions • Understand and evaluate random processes underlying statistical experiments • Make inferences and justify conclusions from sample surveys, experiments, and observational studies
Quarter 2	• Use Conditional Probability & Rules of Probability • Understand independence and conditional probability and use them to interpret data • Use the rules of probability to compute probabilities of compound events. • Use Probability to Make Decisions • Calculate expected values and use them to solve problems • Use probability to evaluate outcomes of decisions

Math/Trigonometry

Quarter 3	• Define concept of angle measure & use to solve problems involving circles; • Define 6 trigonometric functions & use them to solve problems; • Extend the domain of trigonometric functions using the unit circle. • Relate trigonometric functions to their graphs; • Use sinusoidal curve fitting to model & solve problems.
Quarter 4	• Define 6 inverse trigonometric angles & use them to solve problems. • Prove and apply trigonometric identities • Solve problems involving triangles by using trigonometric functions; • Model periodic phenomena with trigonometric functions.

English

English 1

Quarter 1 Of Mice and Men Short Stories Personal Narrative	● Identify main ideas and details in literary text ● Summarize literary text ● Make inferences and predictions based on evidence from a text ● Analyze the influence of history and culture on a literary text ● Analyze the development of themes and apply to real life ● Analyze various aspects of literature, forming opinions and using evidence from the text to support ● Create a writing piece using plot and narrative devices to engage the reader
Quarter 2 Parts of Speech Romeo & Juliet Phrases & Sentences Informative Writing & Presentation	● Identify main ideas and details in literary and non-fiction text ● Summarize literary and non-fiction text ● Make inferences and predictions based on evidence from a text ● Analyze the development of themes and apply to real life ● Analyze character development ● Compare and contrast characters, settings and themes across various texts ● Analyze use of dramatic devices to convey meaning ● Identify the parts of speech and their functions ● Create a “slang dictionary” categorizing words by part of speech ● Identify phrases, clauses and sentences ● Compose complete sentences ● Speak to effectively inform an audience ● Create a writing piece to effectively inform a reader
Quarter 3 Research Paper Lord of the Flies Literary Analysis	● Identify main ideas and details in literary and non-fiction text ● Summarize literary and non-fiction text ● Make inferences and predictions based on evidence from a text ● Analyze the development of themes and apply to real life ● Analyze character development ● Compare and contrast characters, settings and themes across various texts ● Create a writing piece analyzing an aspect of literature, constructing an argument and using evidence from the text to support ● Create a writing piece by researching a topic and synthesizing information from a variety of sources

Quarter 4 Verb Tense/ Subject-Verb Agreement Argumentative Writing Fahrenheit 451 Select poetry Select non-fiction	• Write using correct and consistent verb tense • Write with subjects and verbs in agreement • Create a writing piece by constructing an argument and citing evidence from a text • Identify main ideas and details in literary and non-fiction text • Summarize literary and non-fiction text • Make inferences and predictions based on evidence from a text • Analyze the development of themes and apply to real life • Analyze character development • Compare and contrast characters, settings and themes across various texts • Analyze use of poetic devices to convey meaning

English 2

Quarter 1 Short Stories Analysis Vocab and Literary Devices Narratives and Creative writing	• Create writing using plot and narrative devices in a logical way • Clarify meanings of new words or words with multiple meanings • Demonstrate an understanding of figurative language
Quarter 2 Anthem novel study Career Research Short Stories Analysis Semester Projects	• Write an effective informational piece using clear introductions, claims/ evidence, conclusions, and formal language. • Present gathered information effectively and logically • Use MLA format • Use planned drafting and revision methods • Conduct a thorough research project

Quarter 3 Short Stories Analysis A Lesson Before Dying novel study Debate Unit	• Write an effective argument using clear introductions, claims/ evidence, conclusions, and formal language. • Demonstrate an understanding of figurative language • Evaluate evidence in an argumentative text • Analyze historical US documents • Evaluate a speaker's POV
Quarter 4 Literary Analysis Research Short Stories Analysis Plays and Greek Lit Semester Projects	• Present gathered information effectively and logically • Use MLA format • Use planned drafting and revision methods • Conduct a thorough research project • Evaluate a speaker's POV

English III American Literature

Semester 1	Literary Periods and Specific Authors • Identify characteristics of the forms of the following: creation myth, trickster tale, folk tale, memoir, historical narrative, drama, and autobiography • Identify and analyze historic influences on the development of American literature through colonization and religious movements • Understand the revolutionary period and the Enlightenment and its influence • Understand romanticism as a literary movement • Identify elements of transcendentalism • Identify and analyze satire as used by Irving • Identify and analyze unity of effect as used by Poe Text Analysis • Analyze historical context; analyze cultural characteristics • Analyze historically important speeches, public documents, and letters • Analyze themes; analyze the author's purpose; analyze characters • Analyze diction and tone; analyze imagery and figurative language • Analyze and evaluate elements of an argument • Analyze persuasive techniques and rhetorical devices • Analyze and evaluate primary sources

- Analyze various structural patterns
- Synthesize ideas and connect texts
- Identify and analyze blank verse
- Identify and analyze stanza, rhyme scheme, and meter in poetry
- Identify and analyze sound devices and imagery
- Interpret symbol and allegory
- Identify and analyze satire and unity of effect
- Analyze elements of an essay
- Determine an author's point of view or purpose; analyze style and content
- Identify and analyze literary elements, including tone, theme, diction, voice, irony, imagery, setting, and character development

Reading

- Develop strategies for reading older texts
- Develop comprehension monitoring skills
- Paraphrase main ideas; summarize information; make inferences
- Clarify meanings; examine complex sentences

Writing and Language

- Create a multimedia presentation
- Write an argumentative essay
- Use prepositional phrases and adverb clauses as modifiers
- Understand and use compound and compound-complex sentences
- Write a short story
- Use rhetorical questions
- Identify and use parallelism and adjective clauses
- Use imperative sentences and dashes

Speaking and Listening, Media and Viewing

- Interpret and evaluate information presented in media and illustrations
- Analyze and evaluate persuasive techniques in print advertising
- Analyze how media messages reflect cultural views and influence cultural values and stereotypes
- Analyze how words, images, graphics, and sound impact meaning
- Evaluate film techniques; evaluate multiple interpretations of a play
- Dramatize a script
- Evaluate the interactions of different techniques used in media
- Evaluate how meaning is conveyed in visual media

Vocabulary

- Determine the meaning of multiple-meaning words
- Understand and use specialized vocabulary
- Use knowledge of word roots and affixes to determine word meaning

	● Research word origins Technology ● Set learning goals, develop strategies using technology, reflecting on learning ● Customize learning environment to support the learning process ● Seek feedback to inform and improve their practice and demonstrate learning in a variety of ways ● Understand fundamental concepts of current educational technology ● Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property ● Plan and employ effective research strategies to locate reliable information and other resources

Semester 2	Literary Periods and Specific Authors ● Understand and analyze the historical and cultural contexts of romanticism, realism, regionalism, naturalism, the Harlem Renaissance, and modernism as literary movements ● Analyze the styles of Whitman, Dickinson, Fitzgerald, Lee, Frost, and Hemingway ● Understand and analyze the historical and cultural context of contemporary literature ● Analyze the effects of conflict and division on the development of literary styles Text Analysis ● Analyze and evaluate free verse ● Analyze elements of style, including tone, sentence structure, figurative language, and dialogue ● Analyze narrative elements, including theme, structure, conflict, and characterization ● Evaluate the structure and reasoning used in a work ● Analyze descriptive language, including imagery, repetition, and diction ● Identify and analyze literary elements: ○ Setting, plot, conflict, diction, voice, mood, irony, imagery, and character development ● Analyze irony, hyperbole, paradox, understatement, and interpret rhetorical techniques in literature ● Identify and analyze an author's viewpoint, purpose, and perspective ● Analyze how an author's choice of genre or text structure affects the expression of a theme or topic ● Identify and analyze rhyme scheme in poetry ● Analyze and interpret modern, narrative, and imagist poetry ● Distinguish literal from figurative meaning ● Identify and interpret allusions ● Identify and analyze tone, imagery, voice, personification, and sound devices ● Analyze primary and secondary source documents ● Analyze and trace elements of an argument, including claim, reasons, evidence, and counterargument ● Identify faulty reasoning, including circular logic and non-sequiturs ● Make inferences about theme, genre, structure, and elements of drama in different cultural and historical contexts Reading ● Take notes; synthesize information ● Make inferences and draw conclusions about characters ● Identify and evaluate main ideas and supporting details ● Analyze inductive and deductive reasoning Writing and Language ● Make effective word choices; use vivid verbs ● Write an informative article ● Write an analytical essay ● Use gerunds and gerund phrases ● Use passive and active voice effectively ● Craft effective sentences by using vivid language, phrases, and coordinating conjunctions ● Use word choice, sentence structure, and tone to establish voice ● Use word choice, imagery, and tone to create mood ● Write a research paper

	○ Decide on a topic, plan research, find and evaluate relevant sources ○ Identify and analyze bias ○ Use effective note taking skills; avoid plagiarism ○ Use MLA 8th edition formatting in research papers and other written works ● Proofread writing to correct convention and stylistic errors ● Edit content to produce a balanced, polished final work Speaking and Listening, Media and Viewing ● Analyze an argument in a newspaper article ● Compare and contrast perspectives in news reports, articles, and other informational sources ● Identify and analyze bias in fictional works ● Compare and contrast print and film versions of a work ● Maintain an online feature article ● Interpret and evaluate messages in photography and fine art ● Create a visual representation Vocabulary ● Use knowledge of Latin and Greek roots to understand word meaning ● Discriminate between connotative and denotative meanings of words ● Use context clues to determine shades of meanings and the meanings of idioms ● Read and understand analogies ● Use a thesaurus to find precise words and understand nuances of words ● Library skills and terms ● Internet terms and research aids and sources Technology ● Plan and employ effective research strategies to locate reliable information and other resources online ● Evaluate the accuracy, perspective, credibility, and relevance of information, media, data, or other resources ● Select and use digital tools to assist in learning and produce products to support learning using higher-level strategies and methods ● Break problems or projects into component parts, extract key information, research solutions and additions, develop original and creative projects to demonstrate learning ● Choose the appropriate platforms and tools for meeting the desired objectives of creation or communication ● Publish and/or present content to customize the message and medium for intended audiences ● Use digital tools to connect with other learners and collaborate and engage in ways to broaden mutual understanding and learning ● Use collaborative technologies to work with others, give and receive constructive feedback, examine issues and problems from multiple viewpoints, and reach a consensus to produce a viable group product ● Contribute constructively to project teams, assume various roles and responsibilities to work effectively toward a common goal

English 4-ENG 099

Quarter 1 (ENG 099) Read Think Write Text Mywritinglab Exercises Summary Writing	● Understand the various phases of the reading process ● Utilize strategies to increase focus and concentration while reading ● Analyze various meanings of vocabulary ● Identify stated main ideas in a text ● Identify implied main ideas in a text ● Summarize and outline text ● Analyze the organization of a text ● Make inferences and predictions based on evidence from a text ● Understand the various phases of the writing process ● Understand and identify types of essays ● Write cohesive paragraphs ● Paraphrase information from a text
Quarter 2 (ENG 099) Read Think Write Text Mywritinglab Exercises Informative/ Definition Paper Compare/ Contrast Paper	● Analyze denotative and connotative meanings ● Analyze and differentiate between stated and implied main ideas ● Derive vocabulary meanings from context using context clues and word parts ● Build an extended vocabulary ● Analyze verb forms, uses and problems ● Utilize MLA citations and works cited to avoid plagiarism ● Create a writing piece analyzing a term or topic and synthesizing the information in an organized format. ● Create a writing piece comparing and contrasting two elements
Quarter 3 *Beowulf* Personal Narrative *Frankenstein* Argumentative Writing	● Identify main ideas and details in literary text ● Summarize literary text ● Make inferences and predictions based on evidence from a text ● Analyze the development of themes and apply to real life ● Analyze character development ● Compare and contrast characters, settings and themes across various texts ● Compose a creative and engaging narrative writing piece utilizing effective strategies ● Create a writing piece analyzing an aspect of literature, constructing an argument and using evidence from the text to support

Quarter 4 Job/Career Unit Research Paper Poetry	• Create an effective cover letter and resume for employment • Research a topic and synthesize information from a variety of sources • Create a writing piece by researching a topic and synthesizing information from a variety of sources • Identify main ideas and details in literary and non-fiction text • Summarize literary and non-fiction text • Analyze the development of themes and apply to real life • Analyze the form and style of various types of poetry • Compare and contrast literary pieces with similar themes

Foreign Language

HS French

Quarter 1	• Listening comprehension • Reading comprehension • Intercultural competence • Basic Phrases • Basic Vocabulary
Quarter 2	• Listening comprehension • Reading comprehension • Intercultural competence • Basic Sentence Structures • Basic Vocabulary
Quarter 3	• Listening & reading comprehension • Increased focus on written production • Intercultural competence • Basic Sentence Structures • Basic Vocabulary
Quarter 4	• Listening & reading comprehension • Small amount of free voluntary reading • Written production • Increased focus on oral production (speaking) • Communicative competence

HS/Spanish

Quarter 1	● Listening comprehension ● Reading comprehension ● Intercultural competence
Quarter 2	● Listening comprehension ● Reading comprehension ● Intercultural competence
Quarter 3	● Listening & reading comprehension ● Begin small amount of free voluntary reading (FVR) to boost acquisition of high-frequency structures ● Increased focus on written production ● Intercultural competence
Quarter 4	● Listening & reading comprehension ● Small amount of free voluntary reading ● Written production ● Increased focus on oral production (speaking) ● Communicative competence

Science

Biology

Quarter 1	● Explain how microscopy has advanced the last 300 years and how it has benefited medical science. ● Create a bubble diagram utilizing the 4 concepts of the nature of science and explain why they are important when studying science ● When shown a photo of an object, utilizing the characteristics of life, explain why it is or is not a living organism
Quarter 2	● Explain with examples how biology and chemistry are directly related ● Differentiate between the structures of prokaryotic and eukaryotic cells and how they function ● Develop a model demonstrating how homeostasis is essential for a living organism ● Differentiate between active and passive transport and their subdivisions

Quarter 3	● Differentiate between cellular respiration and fermentation and the total ATP's produced by each process, including when each process is likely to occur ● Diagram the process of photosynthesis from the collecting of photon energy to the production of carbohydrates ● Create models of a food web and food chain and explain how they are different ● Create diagrams of mitosis and meiosis and explain how the phases are different in each ● Create a protein utilizing the appropriate amino acids
Quarter 4	● Conduct a lab experiment analyzing the genetic trait of lactose intolerance in human evolution ● Research a randomly chosen dinosaur and create a poster with drawing and explaining how it lived in its environment ● Research and analyze updated information on how humans have impacted our environment as it relates to climate change

Integrated Physical Science

Quarter 1	● Identify the steps scientists often use to solve problems. ● Analyze data using various types of tables and graphs. ● Solve quantitative problems mathematically. ● Use the SI system of measurement is all phases of their work in science. ● Apply Newton's laws to solve motion problems. ● Use several laboratory tools to explore various physics phenomena. Topics: · The Nature of Science · Motion & Speed · Forces · Types of Energy
Quarter 2	● Explain the phenomena of sound in terms of production, propagation, and perception. ● Explain several phenomena of light. ● Demonstrate an understanding of the law of electricity and magnetism. ● Solve quantitative problems mathematically. ● Use the SI system of measurement is all phases of their work in science. ● Apply the conservation laws to explain how energy, mass, momentum, and charge stay constant in a system. ● Use several laboratory tools to explore various physics phenomena. Topics: · Energy · Work and Machines · Thermal Energy · Electricity · Magnetism · Waves · Sound · Light

	· Mirrors and Lenses
Quarter 3	● Explain the structure, properties, and interactions of matter ● Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms. ● Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties. ● Develop a model to illustrate that the release or absorption of energy from a chemical reaction system depends upon the changes in total bond energy. ● Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction. ● Use several laboratory tools to explore various chemistry phenomena. ● Use the SI system of measurement is all phases of their work in science. Topics: · Solids, Liquids, and Gases · Classification of Matter · Elements and Their Properties · Properties of Atoms and the Periodic Table · Chemical Bonds · Chemical Reactions · Acids, Bases, and Salts
Quarter 4	● Describe the universe and determine the Earth's place in it. ● Indicate how the Earth is constantly changing and postulate why the changes are occurring. ● Relate the Earth's surface processes to human activity. ● Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants. ● Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering. ● Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts. ● Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem. ● Use several laboratory tools to explore various chemistry phenomena. Topics: · Earth System Evolution · Earth's Dynamic Geosphere · Earth's Natural Resources · Understanding Your Environment · Earth's Fluid Spheres

Environmental Science

Quarter 1	● Ecology, Recycling Matter, Biogeochemical Cycles ● Evaluate the evidence and reasoning that ecosystems are complex and species are closely connected with each other ● Use math to support claims for the cycling of matter and flow of energy among organisms in an ecosystem ● Develop a model to illustrate the role of photosynthesis and cellular respiration in the cycling of carbon ● Design a solution for reducing the impacts of human activities on the environment and biodiversity
Quarter 2	● Biomes, Communities & Populations ● Use math to support evidence about factors affecting biodiversity and populations in ecosystems ● Construct an explanation for the cycling of matter and flow of energy in aerobic and anaerobic conditions. ● Use math to support explanations of factors that affect carrying capacity of ecosystems ● Evaluate the evidence for the role of group behavior on species' chances to survive
Quarter 3	● Human Population, Biodiversity, Water Use & Management ● Use math to support explanations of factors that affect carrying capacity of ecosystems ● Use math to support evidence about factors affecting biodiversity and populations in ecosystems ● Design a solution for reducing the impacts of human activities on the environment and biodiversity ● Evaluate the evidence for the role of group behavior on species' chances to survive ● Design a solution to the problem of world water use and management
Quarter 4	● Water Pollution, Air Pollution, Climate Change, Energy ● Design a solution to the world problem of climate change ● Evaluate solutions that reduce the impacts of human impacts on natural resources ● Evaluate the evidence that relationships among Earth systems are being modified due to human activity.

Human Biology

Month	Unit/Topics	Skills / Standards	Projects/Assessments	Writing Activities
August	Class rules, lab safety, scientific equipment, science in the news	Illinois State Goals: 13.A4a-d and 13.A.5a-d	Lab safety video, microscope labs, Test on the history and function of the microscope.	Write about a sci in the news topic, summarize with an opinion. Students had to write quizzes to go w/ safety videos for others to take.
September	Scientific method, graphing, characteristics of life, Science in the news	Illinois State Goals: 11.4.4a-f, 11.4.5a-f, 12.A.5a, 12.S.4b-c, 12.C.4b, 12F,4a; NGSS: HS-LS-1-2, HS-LS-1-3, HS-LS-1-6, HS-PS-1,2	Lab safety quiz Graphing packet. Scientific method packet	Students read and reviewed a science article from online

October	Cell, Cell Parts, Transport, Protein Synthesis, Mitosis	State Goals: 12.A.5a, 12.S.4b-c, 12.C.4b, 12F,4a; NGSS: HS-LS-1-2, HS-LS-1-3, HS-LS-1-6, HS-PS-1,2	2 unit tests, lab practical identifying mitotic phases and what occurs in them.	Research a chromosomal disorder, make a PPT to share with the class.
November	Levels of organization, Cavities, Divisions, Regions, Tissues Integumentary system	Illinois State Goals; 12.A.4-6, 5A-B; NGSS: HS-LS2,6	Several Tissue ID labs with test	Research a tissue disorder and write a page describing it, how it's treated and prognosis.
December	Skeletal System	Illinois State Goals: 12.A. 4a-c, 5a-b NGSS: HS-LS2	Skeleton ID packets by region, Skeletal system practical test, Test on bone development and bone growth	Read an article and write a summary on how bones heal when broken.
January	Senses: eye and ear	HS-LS1-4	Packets on eye and ear structure, Tests on the A & P of the eye and ear. Eye dissection. Start a project regarding night vision of animals and how it can be use to improve night vision for the military--for district meeting.	Students researched an eye disorder and made a PPT describing it, how it's treated and prognosis. Presented to the class.
February	Nervous System and Brain, Muscular System	Illinois State Goals: 12.A. 4a-c, 5a-b NGSS: HS-LS4, HS-LS3	Nervous system test over neurons, nerves, brain A & P. Lab, whole and sagittal sheep brain dissection, practical on the sheep brain. Muscle ID activities and test.	Research a nervous system disorder, describe it and how it is treated.
March	Circulatory System	Illinois State Goals: 12.A. 4a-c, 5a-b NGSS: HS-LS4	Test on blood vessel A & P, circulatory dissection of arteries/veins of a rat, practical test on artery/vein ID in the rat.	Students will research a blood disorder, describe and tell how it's treated.
April	Respiratory System, Digestive System	Illinois State Goals: 12.A. 4a-c, 5a-b NGSS: HS-LS5	Dissection of respiratory and digestive systems of the rat, test on the respiratory and digestive systems	Create a model of the digestive system with labels of major digestive enzymes and their functions.

May	Urinary System, Reproductive System	Illinois State Goals: 12.A. 4a-c, 5a-b NGSS: HS-LS4	Packets on urinary and reproductive systems. Dissection of these systems in the rat. Test on the A &P of these systems.	Research a urinary or reproductive system disorder, write a summary that describes it and how it is treated.

Advanced Biology

Quarter 1	Trees ● Be able to identify various regional species of trees by common and scientific names ● Explain the purpose and significance of hibernation in plants and animals Bacteria, Viruses, Protists ● Design and conduct an experiment and write a formal lab report on bacteria ● Design an explanation, using bacteria, that common ancestry and evolution are supported by evidence ● Evaluate the claim that all life has evolved from single celled organisms ● Construct an explanation based on evidence for how DNA determines the structure of proteins with carry out the essential functions of life
Quarter 2	Fungi, Plants ● Devise an explanation for the evidence that places Fungi in their own kingdom ● Compare and contrast fungi and plants ● Develop a model that illustrates how photosynthesis transforms light energy into chemical energy
Quarter 3	Simple Animals ● Evaluate a model and study a living organism, that illustrate how cell division and differentiation produces and maintains complex organisms ● Design an explanation, using simple animals, that common ancestry and evolution are supported by evidence ● Develop a model that illustrates the hierarchical organization of multicellular organisms ● Conduct research to discover how simple animals are used in medical advances for humans ● Develop an apparatus that solves a human problem by using characteristics of simple animals
Quarter 4	Complex Animals ● Design an explanation, using complex animals, that common ancestry and evolution are supported by evidence ● Use a sheep's heart to compare and contrast a closed circulatory system with an open circulatory system ● Conduct research to discover how simple animals are used in medical advances for humans

Chemistry

Quarter 1	● Develop a definition of matter and classify it according to physical and chemical properties/changes. ● Describe the basic structure of the periodic table to include identification of metals, metalloids, and nonmetals as well as identifying rows and groups (families). ● Calculate density and use it to identify unknown substances. ● Perform calculations with appropriate significant figures, percent error, and percent difference. ● Interpret data and graphs to develop quantitative relationships. ● Outline the historical progression of the atomic theory. ● Calculate the quantity of atoms in a sample and the number of subatomic particles in an atom. Topics: · Matter and Change · Measurements and Calculations · Atoms: The Building Blocks of Matter
Quarter 2	● Describe the impact of experiments on the development of the modern atomic theory of the atom. ● Specify the location of each electron in the atom. ● Organize the periodic table based on periodicity. ● Predict the chemistry of an element using atomic radii, ionic radii, electronegativity, ionization energy, and electron affinity. ● Predict molecular geometry by applying VESPR theory. ● Differentiate between covalent, metallic, and ionic bonding in structure, strength, and the effect on physical properties. ● Apply the concept of potential energy as it pertains to chemical bond length and energy. Topics: · Arrangement of Electrons in Atoms · The Periodic Law · Chemical Bonding
Quarter 3	● Indicate naming rules and apply them to nomenclature of compounds. ● Calculate formula mass, molar mass, and percent composition. ● Predict the products and balance a chemical equation. ● Use the activity series to predict whether a reaction will take place. ● Calculate the amount of unknown reactants or products in a balanced chemical reaction. Topics: · Chemical Formulas and Chemical Compounds · Chemical Equations and Reactions · Stoichiometry

Quarter 4	● Utilize the gas laws to show mathematical relationships between pressure, volume, temperature and quantities of gas. ● Apply the kinetic theory of matter to predict structure and behavior of matter. ● Define equilibrium and understand how concentration, temperature, and pressure affect it. ● Distinguish solutions from suspensions and colloids. ● Calculate the concentration of solutions and predict its impact on a chemical reaction. ● Understand the effect of colligative properties of solutions on physical properties of solutions. ● Use acid-base theory to predict products in a reaction. Topics: · Physical Characteristics and Molecular Composition of Gases · Liquids and Solids · Solutions · Acid and Bases · Acid-Base Titration and pH

Dual Enrollment/BHC Physics 110

Quarter 1	● Solve quantitative problems mathematically ● Use the SI system of measurement is all phases of their work in science ● Apply Newton's laws to solve motion problems ● Use several laboratory tools to explore various physics phenomena Topics: - Motion- 1D, 2D, 3D -Forces -Newton's laws -Circular motion
Quarter 2	● Solve quantitative problems mathematically ● Use the SI system of measurement is all phases of their work in science ● Apply Newton's laws to solve motion problems ● Use several laboratory tools to explore various physics phenomena Topics: -Energy -Work -Power -Pressure -Momentum -Conservation laws of momentum & energy -Fluid Mechanics

Quarter 3	1. Explain the phenomena of sound in terms of production, propagation, and perception 2. Explain several phenomena of light 3. Demonstrate an understanding of the law of electricity and magnetism 4. Solve quantitative problems mathematically 5. Use several laboratory tools to explore various physics 6. Use the SI system of measurement is all phases of their work in science Topics: ● Reflection ● Refraction ● Images ● Optical instruments ● Interferences ● Diffraction ● Polarization ● Electric charge ● Electric field ● Potential difference
Quarter 4	1. Demonstrate an understanding of the law of electricity and magnetism 2. Solve quantitative problems mathematically 3. Use several laboratory tools to explore various physics 4. Use the SI system of measurement is all phases of their work in science Topics: ● Ohm's Laws ● Current ● Resistance ● Electrical instruments ● Circuits - series and parallel ● Magnetic fields ● Magnetic force ● Electromagnetic devices ● Domains ● Alternating current ● Resonance ● Electromagnetic spectrum

Social Studies

World Cultures

Quarter 1	● Introduce geography as a field of study. ● Explain Earth's position in space and the forces acting on Earth's land and water. ● Analyze the interrelationships of solar energy, climate, and vegetation. ● Describe the development of cultures and the results of population expansion.
Quarter 2	● Examine the historical and cultural geography of the United States and Canada. ● Analyze the influence of ancient civilizations, European colonialism, and recent events on societies in Middle and South America. ● Understand how cartograms are constructed to present geographic information.
Quarter 3	● Describe the major landforms, bodies of water, climate, and resources of Europe. ● Discuss Europe's influence in international affairs. ● Examine the progression of Northern Eurasia's history, from early periods through communism to the breakup of the Soviet Union.
Quarter 4	● Describe how the physical geography and economic geography of Southwest Asia affect ways of life there. - Trace the history and development of religion in the region, and analyze the role that religion has played in events in Southwest Asia - Compare the cultures and ways of life of people in different regions of Africa.

U.S. Government

Quarter 1	● Explain how the state of nature led to the formation of the "social contract." ● Analyze the four government systems (democracy, communism, authoritarianism, monarchy). ● Describe why the Articles of Confederation failed and use evidence to support the claim. ● Analyze the core documents that inspired the founding fathers to create our constitutional republic. ● Identify and describe the debates and negotiations that led to the ratification of the Constitution. <u>Topics:</u> The Social Contract Government Origins The Constitutional Convention
Quarter 2	● Explain how the three branch system of government maintains the separation of powers. ● Research and debate the policies of the candidates in the upcoming gubernatorial election. ● Evaluate the concept of federalism in relation to the Illinois Constitution. ● Differentiate the Chicago system of government and the local governments of downstate Illinois. <u>Topics:</u> The United States Constitution 2018 Illinois Gubernatorial Election The Illinois Constitution

Quarter 3	• Discuss and classify the political parties in the United States. • Research the platforms of political parties in order to simulate the campaign and election process. • Analyze and describe the effect of the Citizens United Supreme Court decision on campaign fundraising. • Explain the impact of sensationalism and polling data presented by the media. <u>Topics:</u> Political Parties Campaigns, Elections, and Voting The Media
Quarter 4	• Research and debate controversial issues while using evidence to support claims. • Assess and describe how peaceful protests lead to government legislation and social change in this country. • Analyze and discuss how the United Nations cooperate and function to maintain international agreements and deter conflict. • Research and debate world conflicts in a Model UN format. <u>Topics:</u> Current Events Civil Rights Bureaucracy The United Nations

HS/US History

Quarter 1	• Summarize and explore the prehistory of the Americas through the colonial era. • Identify global and regional factors contributing to the chain of events prior to the American Revolution. Topics: -Early colonial settlements and interactions with Native Americans -Relations with Great Britain and how those changed overtime
Quarter 2	• Analyze and evaluate the decisions and documents of the early republic and its leaders. • Explore the role of slavery in the nation's founding, emergence, and disunity. • Deconstruct the events surrounding the American Civil War and the reconstruction era. Topics: -Amendments, Federalism, -State and Federal Govt. -Causes and effects of Civil War

Quarter 3	• Apply, analyze, and evaluate the costs and benefits of westward expansion, imperialism, and global conflicts. • Discuss the emergence of significant and controversial immigration policy. Topics: -Wars and American involvement (WW1, WW2) -Roaring 20s and Great Depression
Quarter 4	• Explore and discuss the civil rights era, economic booms and busts, hot and cold wars, terrorism, technology, contemporary politics, and the modern era of globalization. Topics: -Cold War, Proxy Wars (Korea, Vietnam, Middle East) -How policies of administrations shaped present day

High School/World History

Quarter 1	• Describe how people have used diverse tools and technologies to adapt to and affect the environment over time. • Explain how the Neolithic Revolution led to the first civilizations. • Analyze early conflicts, exchanges, and alliances that influenced the processes of state building, expansion, and dissolution. • Explain and compare how rulers constructed and maintained different forms of governance. <u>Topics:</u> Early Human Migrations Neolithic Revolution Early Empires Ancient China
Quarter 2	• Analyze the ways in which religious and secular belief systems affected political, economic, and social institutions. • Explain and compare how rulers constructed and maintained different forms of governance. • Describe the system of feudalism and evaluate its effects on society. • Research and use persuasion to defend or criticize Columbus and the effects of the Columbian Exchange. <u>Topics:</u> Ancient Greece Ancient Rome Middle Ages Columbian Exchange South American Civilizations

Quarter 3	● Analyze how new scientific, technological, and medical innovations affected religions, belief systems, philosophies, and major ideologies. ● Assess how and why internal conflicts, such as revolts and revolutions, have influenced the process of state building, expansion, and dissolution. ● Analyze how technology shaped the processes of industrialization and globalization. ● Evaluate and explain how militarism, alliances, imperialism, and nationalism led to World War 1. <u>Topics:</u> The Renaissance The French Revolution Industrial Revolution and Imperialism World War I Russian Revolution
Quarter 4	● Explain and compare how rulers and political institutions constructed and maintained different forms of governance. ● Assess how and why internal conflicts, such as revolts and revolutions, have influenced the process of state building, expansion, and dissolution. ● Research and develop a claim regarding what caused Hitler to seize power in Germany. ● Analyze the spread of communism and explain the geopolitical changes during the Cold War. ● Research and analyze the rise of terrorism and its effects on the geopolitical relationships in the Middle East. <u>Topics:</u> World War II African and South American Independence The Cold War Modern World History

HS/Psychology

Quarter 1	● Remember and understand the basic history of psychology and varying approaches to the field. ● Identify anatomy of brain and sensory function. ● Explore and chart stages of human physical and cognitive development. Topics: -Parts of brain -Piaget, Pavlov, etc. -Individual decisions

Quarter 2	● Apply developmental knowledge to understanding of personality. ● Evaluate methods of resolving conflicts. ● Analyze psychological disorders. ● Create an all-encompassing outline of a specific disorder, including symptoms, diagnoses, and approaches to treatment and understanding. ● Explore societal and sociocultural psychological factors, such as norms, taboos, rites of passage, etc. Topics: -Ethics -Decision making -Mental health disorders and treatment

Sociology

Quarter 3	● Explain the Sociological Perspective and provide examples of how it is used in sociology. ● Research and use one of the three primary theoretical perspectives in sociology to explain a social issue. ● Describe the main components of culture and how ethnocentrism affects our perception of it. ● Analyze the concept of deviance and explain why it occurs in societies. <u>Topics:</u> Sociological Perspective & Research Methods Culture and Socialization Social Control and Deviance
Quarter 4	● Research the topics of race and gender and use evidence to determine if those distinctions lead to a difference in treatment by society. ● Compare and contrast the mainstream family structure portrayed in the 1950s to the modern family structure. ● Explain how religion influences the socialization process in different cultures. ● Research and support a claim regarding what “social change” is needed most in the United States today. <u>Topics:</u> Race and Gender Family and Religion Social Change

Economics

Quarter 1	• Explain the concept of scarcity in relation to the study of economics. • Describe how opportunity cost affects the decisions of consumers. • Evaluate and discuss the success of the four different forms of economic systems. • Compare and contrast the theories of Karl Marx and Adam Smith. • Analyze how supply and demand affect market equilibrium and the determination of prices. <u>Topics:</u> Scarcity and Opportunity Cost Economic Systems Intro to Microeconomics Supply and Demand
Quarter 2	• Research and analyze the organizational structures of corporations and their impact on the economy. • Evaluate and assess companies to invest in via a stock market simulation. • Compare and contrast the Great Depression and the 2008 Recession. • Analyze the free market and discuss how entrepreneurship and competition is stimulated. • Research the pros and cons of globalization and come to a conclusion using evidence to support a claim. <u>Topics</u> The Stock Market Intro to Macroeconomics Capitalism Globalization and World Trade

Industrial Technology

Quarter 1	Woods 11/12: • Justifies the use of specific tools and materials in the design of a product. • Design woods product that meets a specific purpose or solves a problem for the student. AutoCad 11/12: • Develop skills to create drawings for a product to meet specifications. • Develop skills to modify drawings. Principles of Engineering 10: • Write a design brief to justify/explain the use of specific simple machines in the design of a complex machine. • Design and construct a complex machine that solves a consumer need or want. Introduction to Engineering Design 9: • Propose a plan to improve a commonly used product. • Collaborate with a team to design a product following proposal specifications. • Create a presentation to explain and justify the final product.
Quarter 2	Woods 11/12 • Construct product using individual design

	AutoCad 11/12 ● Create drawings for a product to meet specifications. ● Modify drawings. Introduction to Engineering Design ● Calculate the travel of common cams. ● Construct a device that utilizes cams that demonstrates the differences in cams. Principles of Engineering ● Analyze how effective recycled materials as insulation ● Construct a machine using principles of energy, power, simple machines, and mechanical advantage.
Quarter 3	Woods 11/12 ● Calculate the material cost for cabinets. AutoCAD 11/12 ● Apply modeling skills in the design of a product that solves a specific need. Introduction to Engineering Design ● Design a deer yard ornament per the Design Challenge Brief Principles of Engineering ● Construct a truss and bridge utilizing statics principles ● Analyze results of bridge and truss testing to improve designs.
Quarter 4	Woods 11/12 ● Plan a manufacturing process to produce a product for resale. AutoCAD 11/12 ● Apply 3D modeling skills to design a product. ● Calculate the materials needed to produce a product. ● Analyze the importance of rapid prototyping. Introduction to Engineering Design 11/12 ● Apply the Design Process to design product following customers design briefs. Principles of Engineering ● Apply automation and control system skills to design a manufacturing system. ● Construct an automated device that solves a predetermined problem.

Family & Consumer Science

Quarter 1	Foods ● Examine the impact of psychological, cultural, and social influences on food choices and nutrition practices. ● Determine conditions and practices that promote safe food handling. ● Identify kitchen utensils & equipment required to successfully complete a task ● Create a successful workspace in the kitchen ● Complete a weekly, nutritionally balanced meal plan Intro to FACS ● Identify ways to handle peer pressure. ● Demonstrate teamwork and leadership skills in the family, workplace, and community. ● Explore FCCLA ● Analyze the process for building and maintaining interpersonal relationships ● Analyze communication styles and their effects on relationships Resource Management ● Analyze the benefits of good financial decision making ● Develop personal finance goals ● Create a personal budget ● Research a variety of career paths ● Practice and develop interviewing skills ● Describe the principles of taxation & the major categories ● Explore various forms of insurance ● Analyze how economic factors impact financial decisions Parenting ● Recognize the importance of behavioral choices, risks and consequences and their impact upon self and family ● Explain the qualities of a good personal relationship and family relationships
Quarter 2	Foods ● Demonstrate the ability to acquire, handle, and use grains, fruits,and vegetables to meet nutrition and wellness needs of individuals and families across the lifespan. ● Use a recipe and follow the proper cooking techniques in preparing a variety of products ● Follow safe and sanitary procedures in a laboratory setting Intro to FACS ● Analyze the benefits of good financial decision making ● Develop personal finance goals ● Develop a life plan, including pathways to acquiring the knowledge and skills needed to achieve individual, family, and career goals Resource Management ● Describe keys to building and maintaining healthy credit ● Evaluate issues and challenges of financing a home, an education, and a car ● Use a credit card correctly & be financially responsible with credit ● Execute proper operations of a checking account ● Explore services provided by financial institutions ● Examine retirement savings options ● Describe the process of investing in the stock market, bonds, and mutual funds Parenting

	● Demonstrate an awareness of physical, emotional, psychological, and social changes from conception through newborn stages ● Analyze expectations and responsibilities of parenting ● Research the influences of heredity and environment on human growth & development
Quarter 3	Advanced Foods ● Demonstrate the ability to acquire, handle, and use dairy, egg, and meat products to meet nutrition and wellness needs of individuals and families across the lifespan. ● Use a recipe and follow the proper cooking techniques in preparing a variety of products ● Follow safe and sanitary procedures in a laboratory setting Intro to FACS ● Apply time management, organizational, and process skills to prioritize tasks and achieve goals ● Analyze decisions about providing safe and nutritious food for individuals and families ● Use a recipe and follow the proper cooking techniques in preparing a variety of products ● Follow safe and sanitary procedures in a laboratory setting Resource Management ● Analyze the benefits of good financial decision making ● Develop personal finance goals ● Create a personal budget ● Research a variety of career paths ● Practice and develop interviewing skills ● Describe the principles of taxation & the major categories ● Explore various forms of insurance ● Analyze how economic factors impact financial decisions Child Development ● Analyze nurturing practices that support human growth and development ● Demonstrate an awareness of physical, emotional, psychological, and social changes from the newborn through early childhood years ● Construct activities to promote physical, social, emotional, and mental development
Quarter 4	Advanced Foods ● Demonstrate the ability to acquire, handle, and use poultry and seafood products to meet nutrition and wellness needs of individuals and families across the lifespan. ● Follow safe and sanitary procedures in a laboratory setting ● Apply newly acquired skills to demonstrate the ability to select, store, prepare, and serve nutritious and visually appealing foods. ● Explore and create a cultural cuisine ● Create and decorate a variety of desserts ● Explore food service career paths Intro to FACS ● Label and identify the parts of a sewing machine ● Identify sewing equipment ● Evaluate performance characteristics of textile fiber & fabrics ● Evaluate the impact of history of design and designers

	• Demonstrate skills needed to produce, alter, or repair textiles Resource Management • Describe keys to building and maintaining healthy credit • Evaluate issues and challenges of financing a home, an education, and a car • Use a credit card correctly & be financially responsible with credit • Execute proper operations of a checking account • Explore services provided by financial institutions • Examine retirement savings options • Describe the process of investing in the stock market, bonds, and mutual funds Child Development • Observe and evaluate the emotional and social development of infants, toddlers, and preschoolers • Demonstrate an awareness of physical, emotional, psychological, and social changes from the early childhood years through adolescents • Assess common practices and emerging research about influences of discipline on human growth and development • Apply criteria for selecting care ad services for children and youth • Evaluate the effects of abuse and neglect on children and families and determine methods of prevention

Keyboarding

Quarter 1	• Remember keyboard shortcuts for Microsoft Word. Use routine tasks to save documents in google drive or the designated folder on the server
Quarter 2	• Explain the meaning of concepts in Microsoft Word and how to perform this task.

Computer Concepts

Quarter 3	• Prepare a report about an area of study where keyboarding/computer skills will be necessary
Quarter 4	• Compare and contrast differences in Microsoft Excel and Google Sheets as well as Power Point and slides. Create a presentation on your findings.

Accounting

Quarter 1	• Accounting 1: Use mathematical expressions to calculate the assets, liabilities, or owner's equity of a small business firm.
Quarter 2	• Create a presentation that gives step by step instructions on how to reconcile a bank statement
Quarter 3	Explain the differences between accounts receivable and accounts payable accounts use a diagram to show how the totals of each equal the controlling account

Quarter 4	Write a persuasive speech on why high school accounting should/should not be required for high school graduation.

HS/Work Co-op

Quarter 1	● Prepare a report on a career that you are interested in.
Quarter 2	● Make a booklet about five rules that you see as important on your job. Illustrate your booklet using clip art and photos.
Quarter 3	● Write a letter of application and resume for a job that you have found on the internet and may be interested in applying.
Quarter 4	● Develop a set of rules that you would feel would be appropriate for your boss to post at work. These rules would be appropriate for all workers.

HS/Ag science Skills

Quarter 1	● Designing and conduction agricultural research ● Safety in Laboratory ● Soil formation, profile, color, texture and structure ● Soil erosion
Quarter 2	● Calculation soil loss ● Fertilizer formulation ● Classifying and naming plants ● Plant breeding ● Integrated pest management
Quarter 3	● Classifying living things ● Genetics ● Animal welfare ● Anatomy of animals ● Anatomy and physiology of animal reproductive systems
Quarter 4	● Evaluating animal health and behavior ● Red meat harvesting methods ● Tools and equipment in Lab ● Controlling electrical current: circuits, conductors, and insulators ● Alternative energy sources

Ag Mechanics technology

Quarter 1	● Identifying areas in Agriculture ● Recognizing impact of technology ● Understanding construction codes ● Planning and placing concrete
Quarter 2	● Selecting Lumber ● Framing structures ● Introducing electricity ● Identifying metals and their properties
Quarter 3	● Applying heat/cold techniques on metal ● Metal cutting and processing ● Welding ● Human relation skills
Quarter 4	● Understanding effective communication ● Obtaining education for a job ● Applying for a job/ interview for job ● Writing a resume

HS/Construction technology

Quarter 1	● Identifying areas in agriculture ● Safety methods ● Using surveying equipment ● Understanding soil drainage systems ● Using power tools and hand tools
Quarter 2	● Understanding design and planning of plumbing ● Identifying engine systems ● Operating, calibrating, and maintaining Agriculture machines
Quarter 3	● Operating, calibrating, and maintaining Agriculture machines ● Determining the use of technology in food and fiber production ● Understanding and using GPS ● Understanding and Geographic information systems

Quarter 4	• Develop human relation skills • Understanding effective communication • Finding and applying for a job, and job interview skills • Writing a resume

Biological Science Applications in Agriculture

Quarter 1	• Animal Genetics and probability • Chick Embryology • Animal health • Food safety
Quarter 2	• Science behind food • Biotechnology and history • Safety in Laboratory • Exploring Microbiology • Using Enzymes and fermentation in food processing
Quarter 3	• Exploring research methods in Agriculture • Plant tissue testing • Hydroponics • Testing for carbohydrates
Quarter 4	• Designing and conducting research • Using a microscope • Working with cell cultures • Detecting Microbes

Art

High School Ceramics

Quarter 1	• VA:Cr1.2.I Shape an artistic investigation of an aspect of present- day life using a contemporary practice of art or design. • VA:Cr2.2.I Explain how traditional and nontraditional materials may impact human health and the environment and demonstrate safe handling of materials, tools, and equipment. • VA:Re7.1.I Hypothesize ways in which art influences perception and understanding of human experiences. • VA:Cn10.1.I Document the process of developing ideas from early stages to fully elaborated ideas. • VA:Cr3.1.II Engage in constructive critique with peers, then reflect on, re-engage, revise, and refine works of art and design in response to personal artistic vision. • VA:Re7.2.I Analyze how one's understanding of the world is affected by experiencing visual imagery. • VA:Re9.2.I Establish relevant criteria in order to evaluate a work of art or collection of works
Quarter 2	• VA:Pr4.1.I Analyze, select, and curate artifacts or artworks for presentation and preservation. • VA:Pr4.1.II Investigate, compare, and contrast methods for preserving and protecting art. • VA:Pr6.1.I Analyze and describe the impact that an exhibition or collection has on personal awareness of social, cultural, or political beliefs and understandings. • VA:Re8.1.I Construct meaningful interpretations, supported by evidence, of an artwork or collection of works through describing and analyzing feelings, subject matter, formal characteristics, artmaking approaches, contextual information, and key concepts. • VA:Cn11.1.I Describe how knowledge of culture, traditions, and history may influence personal responses to art.

ART Design

Quarter 1	• VA:Cr1.2.I Shape an artistic investigation of an aspect of present- day life using a contemporary practice of art or design. • VA:Cr2.2.I Explain how traditional and nontraditional materials may impact human health and the environment and demonstrate safe handling of materials, tools, and equipment. • VA:Re7.1.I Hypothesize ways in which art influences perception and understanding of human experiences. • VA:Cn10.1.I Document the process of developing ideas from early stages to fully elaborated ideas.
Quarter 2	• VA:Cr3.1.II Engage in constructive critique with peers, then reflect on, re-engage, revise, and refine works of art and design in response to personal artistic vision. • VA:Re7.2.I Analyze how one's understanding of the world is affected by experiencing visual imagery. • VA:Re9.2.I Establish relevant criteria in order to evaluate a work of art or collection of works
Quarter 3	• VA:Pr4.1.I Analyze, select, and curate artifacts or artworks for presentation and preservation. • VA:Pr4.1.II Investigate, compare, and contrast methods for preserving and protecting art.
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High School Drawing

Quarter 1	• VA:Cr1.2.I Shape an artistic investigation of an aspect of present day life using a contemporary practice of art or design. • VA:Cr2.2.I Explain how traditional and nontraditional materials may impact human health and the environment and demonstrate safe handling of materials, tools, and equipment. • VA:Re7.1.I Hypothesize ways in which art influences perception and understanding of human experiences. • VA:Cn10.1.I Document the process of developing ideas from early stages to fully elaborated ideas.
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Quarter 3	• VA:Pr4.1.I Analyze, select, and curate artifacts or artworks for presentation and preservation. • VA:Pr4.1.II Investigate, compare, and contrast methods for preserving and protecting art.
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High School Painting

Quarter 1	• VA:Cr1.2.I Shape an artistic investigation of an aspect of present day life using a contemporary practice of art or design. • VA:Cr2.2.I Explain how traditional and nontraditional materials may impact human health and the environment and demonstrate safe handling of materials, tools, and equipment. • VA:Re7.1.I Hypothesize ways in which art influences perception and understanding of human experiences. • VA:Cn10.1.I Document the process of developing ideas from early stages to fully elaborated ideas. • VA:Cr3.1.II Engage in constructive critique with peers, then reflect on, re-engage, revise, and refine works of art and design in response to personal artistic vision. • VA:Re7.2.I Analyze how one's understanding of the world is affected by experiencing visual imagery. • VA:Re9.2.I Establish relevant criteria in order to evaluate a work of art or collection of works

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Printmaking

Quarter 1	• VA:Cr1.2.I Shape an artistic investigation of an aspect of present day life using a contemporary practice of art or design. • VA:Cr2.2.I Explain how traditional and nontraditional materials may impact human health and the environment and demonstrate safe handling of materials, tools, and equipment. • VA:Re7.1.I Hypothesize ways in which art influences perception and understanding of human experiences. • VA:Cn10.1.I Document the process of developing ideas from early stages to fully elaborated ideas. • VA:Cr3.1.II Engage in constructive critique with peers, then reflect on, reengage, revise, and refine works of art and design in response to personal artistic vision. • VA:Re7.2.I Analyze how one's understanding of the world is affected by experiencing visual imagery. • VA:Re9.2.I Establish relevant criteria in order to evaluate a work of art or collection of works
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High School Sculpture

Quarter 1	• VA:Cr1.2.I Shape an artistic investigation of an aspect of present day life using a contemporary practice of art or design. • VA:Cr2.2.I Explain how traditional and nontraditional materials may impact human health and the environment and demonstrate safe handling of materials, tools, and equipment. • VA:Re7.1.I Hypothesize ways in which art influences perception and understanding of human experiences. • VA:Cn10.1.I Document the process of developing ideas from early stages to fully elaborated ideas. • VA:Cr3.1.II Engage in constructive critique with peers, then reflect on, reengage, revise, and refine works of art and design in response to personal artistic vision. • VA:Re7.2.I Analyze how one's understanding of the world is affected by experiencing visual imagery. • VA:Re9.2.I Establish relevant criteria in order to evaluate a work of art or collection of works
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Music

High School/Band

Quarter 1	• Rehearsing and perform Pep Band charts from Various Eras • Performing in an outdoor • Evaluating Personal Performance
Quarter 2	• Playing as a concert band • Exposure and improving fluency in a variety of key signatures, time signatures, and tonal centers • Developing ensemble sound
Quarter 3	• Playing as a soloist • Playing in a small ensemble for adjudication • College ensemble preparation
Quarter 4	• Listening and evaluating music performed by others • Improving tone and musicality

9-12 grade/Chorus

● Quarter 1	● Analyze, discuss and apply proper breathing techniques and vocal tone production to in-class singing ● Analyze and discuss the success of increasingly complicated rhythmic sight reading performances as a group and individually ● Perform, analyze and discuss major and minor scales as a group and individually ● Critique individual and group progress on fall choral literature and vocal techniques, making suggestions for improvement
● Quarter 2	● Analyze, discuss and apply dynamics, proper diction and phrasing to preparation of fall and winter choral music ● As a class, discover, discuss and apply concepts of “concert preparedness” while prepping for winter concert performance ● Critique individual and group progress on choral literature, making suggestions for improvement
● Quarter 3	● Analyze, discuss and apply musical terms and symbols to preparation of solo and ensemble music ● Analyze and discuss the success of major melodic sight reading performances as a group and individually ● Research the meaning behind the text in a song and use musical concepts to attempt to convey that message to an audience while prepping for solo and ensemble contest performances ● Critique individual and group progress on choral literature, making suggestions for improvement
● Quarter 4	● Analyze, discuss and apply knowledge of more complicated terms and symbols in preparation of spring choral music ● Analyze and discuss the success of major and minor melodic sight reading performances as a group and individually ● As a class, discover, discuss and apply concepts of “concert preparedness” while prepping for spring concert performance ● Critique individual and group progress on choral literature, making suggestions for improvement

High School/Music Theory & Appreciation

Quarter 1 *Music Theory	● Interpret basic written music symbols ● Interpret basic dynamic and musical interpretation markings ● Demonstrate an understanding of major and minor intervals ● Apply knowledge of intervals to creating scales and key signatures in major keys
Quarter 2 *Music Theory	● Demonstrate an understanding of complex intervals ● Apply knowledge of intervals to building triads and chords ● Apply knowledge of intervals to transposing music ● Apply knowledge of major scales and key signatures to composing an original piece of music
Quarter 3 *Music Appreciation	● Demonstrate an understanding of musical instruments, voices and basic music terms to use in response to listening assignments and discussion throughout the course ● Demonstrate knowledge of composers and music styles of the Middle Ages, Renaissance and Baroque eras ● Through listening and responding, apply knowledge of musical style periods to discussions and comparisons of various pieces of music ● Attend live music performances and write about the experiences using terminology and musical concepts discussed in class

Quarter 4 *Music Appreciation	• Demonstrate knowledge of composers and music styles of the Classical, Romantic and Modern eras • Through listening and responding, apply knowledge of musical style periods to discussions and comparisons of various pieces of music • Attend live music performances and write about the experiences using terminology and musical concepts discussed in class • Research and write about a topic in music, presenting and discussing your point of view with others

Business Tech

Accounting

The Accounting class takes students through the basic understanding and procedures for multicolumn journal accounting. The class begins with the basic terms, accounting formulas, and some basic analysis. In September the class begins journaling transactions, works with charts of accounts, and the general ledger. Sprinkled along the way are discussion on ethics and the generally accepted accounting principles. From that point forward varying scenarios will drive implementing these basic tools. By the end of the school year the students are expected to be able to prepare, read, and analyze common financial statements.

Quarter 1 Basic terms, formulas, general ledger, and chart of accounts	Quarter 2 Reading and creating financial statements and balance sheets	Quarter 3 Journalizing purchases, various entries types, employing previous skills within other business scenarios	Quarter 4 Payroll, dividends, and analyzing financial statements.

Keyboarding

The keyboarding class covers both traditional touch typing skills along with basic computer concepts and word processing procedures. By the end of the semester the student is expected to be able to ten-finger type along with being able to manipulate files, create various documents with the proper formatting along with other basic word processing skills.

Quarter 1 Complete basic keyboard training on typing.com. Know how to create, modify, delete and print documents. Practice business class formatting and etiquette in professional/academic emails. Create business letters, memos and resumes using the proper formatting	Quarter 2 Complete intermediate and advanced modules in typing.com. At the complete the student is expected to have a reasonable mastery of the whole keyboard. The second half of the class will introduce the students to PowerPoint, spreadsheets, databases and they will be able to mail merge a Word document

Computer Concepts

Computer Concepts class explores computing in general, computing careers, common business software, and exposes the students to some coding. At the end of the class the student will have an understanding of what computers can do and what careers tracks are available.

Quarter 1 Explore computers and computing including basic terminology and history. Discover various career tracks in computing. Work with various word processing and spreadsheet programs but mostly Word and Excel.	Quarter 2 Work with presentation software and database methods. Explore introductory graphics and audio processing. Understand the Internet's power and concerns over privacy. And finally understand the basic logic inherent in all forms of coding.