

# Warren County Virtual Learning Academy Course Catalog

Secondary (Grades 7-12)

Revised - November 12, 2024

## **GRADES 9-12**

### ENGLISH LANGUAGE ARTS

#### ENGLISH 09 (1 CREDIT) – A&B

#### COURSE NUMBER: ELA09 EMIS CODE: 050160

In the ELA English 9 (9th grade) course, students will develop their reading, writing, and language skills through a comprehensive curriculum that includes reading comprehension, analysis of various literary genres, and writing processes for argumentative, informative, and narrative essays. The course covers essential skills such as finding the meaning of unknown words with texts like "Simone Biles," identifying main ideas in "Fastest Woman in the World," analyzing text structures in "The Plastic Problem," and understanding authors' purposes with "Why Good Advertising Works." Students will learn to find the best evidence with "Two Famous Friends" and critically analyze information with "What's wrong with our food system." The curriculum also emphasizes identifying themes and summarizing, as seen in "Lucky Feet," understanding cause and effect in "Getting Started on Saving the Everglades," and identifying problems and solutions in "Space Food." The writing component guides students from crafting paragraphs, including topic sentences and supporting details, to constructing argumentative essays with a focus on note-taking, types of evidence, introductions, body paragraphs, counterarguments, conclusions, and in-text citations. Poetry analysis includes studying works by Tennyson, Hughes, Shakespeare, Poe, Shakur, Whitman, Donne, and Walker, with an emphasis on figurative language, rhyme schemes, metaphors, diction, imagery, tone, symbolism, personification, and paradox. Interactive activities and resources like CommonLit and Edpuzzle enhance engagement and understanding, ensuring students are well-prepared for the state English Language Arts Assessment.

#### ENGLISH 10 (1 CREDIT) - A&B

### COURSE NUMBER: ELA10

#### EMIS CODE: 050170

In the ELA English 10 (10th grade) course, students will enhance their reading, writing, and language skills through an extensive curriculum that includes mastering the writing process, understanding formal language and transitions, and effectively using textual evidence. The course begins with foundational writing skills and progressively covers more complex tasks such as constructing literary analysis essays, informative/expository essays, and argumentative essays. Students will explore various literary genres and elements, including narrative fiction, myths, fables, poetry, drama, and paired texts, developing their ability to analyze and interpret diverse texts. The writing component is thorough, guiding students from note-taking and thesis development to drafting, revising, and editing comprehensive essays. Additionally, students will engage in units focused on reading informational texts, analyzing articles, and understanding how to construct and deconstruct arguments. The curriculum incorporates a variety of interactive resources and activities, such as CommonLit and BrainPOP, to foster engagement and deeper understanding. Through these multifaceted learning experiences, students are well-prepared for the state English Language Arts Assessment, demonstrating proficiency in reading comprehension, analytical skills, and effective writing.

#### ENGLISH 11 (1 CREDIT) - A&B

### COURSE NUMBER: ELA11

#### EMIS CODE: 050180

In the ELA English 11 (11th grade) course, students will develop their reading, writing, and language skills through a comprehensive curriculum designed to enhance their understanding of language and literature. The course begins with foundational units on word meanings, word changes, hyphenation, spelling, usage, and references, building a strong basis in language mechanics. As students progress, they will delve into themes, central ideas, and textual evidence, developing their analytical skills. The curriculum covers figures of speech such as hyperbole and paradox and explores the author's purpose, view, and plot structures. Students will engage with various text features and directions, and analyze ideas and events within different types of writing. The course includes reading and analyzing both fiction and nonfiction texts, such as Edgar Allan Poe's "The Tell-Tale Heart" and Frederick Douglass's "The Narrative of the Life of Frederick Douglass," as well as persuasive texts like "Girls of the Crescent." Themes of courage, being different, failure

and success, and inclusion are explored through various literary works, including poetry about sports, families, and nature. The curriculum also emphasizes understanding word origins, sentence boundaries, and primary sources, such as the Preamble to the Constitution, "The New Colossus," Roosevelt's Declaration of War Address, and the Address to the Nation on Terrorist Attacks. Rhetorical techniques and their application in writing are key components, with units dedicated to rhetoric and students' own writing. The course incorporates interactive resources such as CommonLit, BrainPOP, and other student activities to enhance engagement and understanding. Assessments, including a semester exam and a final exam, ensure that students are well-prepared for the state English Language Arts Assessment, demonstrating proficiency in reading, writing, and critical thinking skills.

#### ENGLISH 12 (1 CREDIT) – A&B

#### COURSE NUMBER: ELA12

#### EMIS CODE: 050190

In the ELA English 12 (12th grade) course, students will develop their reading, writing, and critical thinking skills through an extensive curriculum that covers a variety of British literature, poetry, and research-based writing. The course begins with an exploration of British literature, including excerpts from Shakespeare's "Romeo and Juliet," "Sonnet 5," "Sonnet 18," and Hamlet's soliloquy "To be, or not to be...," as well as works like "If" by Rudyard Kipling, "Sonnet 43," "A Matter of Prejudice," "I Am Offering This Poem," "The Selfish Giant," "The Walrus and the Carpenter," "My Last Duchess," "Love and Friendship," "The Market Square Dog," "The Landlady," "The Land of Story-Books," and "Travel." The curriculum includes an assessment of British literature, followed by a focus on research skills and the analysis of visual information. Students will delve into topics such as "The Science of Branding: Why We Buy," "Battle of the Brands," and "Apple and Branding," learning to use information ethically, paraphrase, analyze visual media, and present information using technology. Lessons on sharing information appropriately, effective questioning, cause and effect analysis, sequencing, chronological order, comparing and contrasting, and media exploration are also included. The writing component emphasizes communicating to persuade and inform, planning and drafting research papers, and understanding primary and secondary sources. Students will analyze political media, create works cited pages, and develop in-text citations. The course culminates in the completion and review of a comprehensive research paper. Interactive resources like CommonLit, BrainPOP, and Discovery Education, along with various student activities, enhance engagement and understanding. This rigorous approach ensures students are well-prepared for post-secondary education and the demands of college-level English, demonstrating proficiency in literary analysis, research skills, and effective communication.

#### **GREEK MYTHOLOGY (½ CREDIT)**

#### EMIS Code: 059999

In the ELA Greek Mythology (High School Elective) course, students will embark on an in-depth exploration of ancient Greek myths, their gods, heroes, and cultural impact. The course begins with an introduction to Greek mythology, setting the stage for understanding its significance and origins. Students will delve into the myths of the Titans and the creation of the world, followed by an examination of the major gods Poseidon and Hades. The curriculum then covers the stories of Athena, Apollo, Artemis, and Aphrodite, enriching students' knowledge of these deities' roles and attributes. Greek geography and culture are explored to provide context for the myths, followed by the tales of Hermes, Ares, Hephaestus, and Hestia, and the lesser gods like Eros, Iris, the Muses, and the Graces, including their influence on the underworld and earthly matters. Students will study the agricultural deities Demeter and Dionysus and the legendary feats of Hercules. The intriguing myths of Prometheus, Epimetheus, Pandora, and Io are analyzed, leading to the adventurous quest for the Golden Fleece with Jason and the Argonauts. The heroic narratives of Theseus and Perseus are examined, followed by the epic stories of the Trojan War and the Fall of Troy. The curriculum culminates with the adventures of Odysseus, the tragic tales of the House of Atreus, and the myths of Daedalus, Icarus, and Atalanta. The course includes interactive activities and materials in ebook and PDF formats to cater to diverse learning preferences. This comprehensive approach ensures that students gain a deep appreciation and understanding of Greek mythology, preparing them for advanced studies in literature and history, while also enhancing their critical thinking and analytical skills.

#### **ROMAN MYTHOLOGY (1/2 CREDIT)**

#### EMIS Code: 059999

In the ELA Roman Mythology (High School Elective) course, students will explore the rich and intricate world of Roman myths, gods, heroes, and their cultural significance. The course begins with an introduction to Roman mythology, laying the foundation for understanding its origins and importance. Students will study Roman geography and culture to contextualize the myths, followed by an in-depth look at the chief deities Jupiter and Juno. The curriculum continues with an examination of Pluto, Proserpine, Neptune, and Mercury, and delves into various tales of transformation. The epic story of Aeneas is a focal point, starting with his role in the Trojan War, his journey, relationship with Dido, adventures in Sicily, and quest for the Golden Bough. The narrative progresses with Aeneas's descent into the underworld, the war in Italy, the founding of Rome, and the initial siege. Students will analyze the great battle, the end of the war, and the legendary tale of Romulus and Remus. The course also covers the story of the Sabine Women, Numa the Wise King, the House of Tarquin, the early Republic, and the rise of Rome. Additionally, students will explore the lives of Roman heroes and emperors, culminating in the myth of Apollo and Daphne. Interactive elements, including mp4 and mp3 resources, student activities, and Discovery Education materials, ensure a dynamic and engaging learning experience. This comprehensive approach allows students to develop a deep understanding of Roman mythology, enhancing their critical thinking and analytical skills while preparing them for advanced studies in literature and history.

#### POETRY (½ CREDIT)

#### EMIS Code: 059999

In the ELA Roman Mythology (High School Elective) course, students will explore the rich and intricate world of Roman myths, gods, heroes, and their cultural significance. The course begins with an introduction to Roman mythology, laying the foundation for understanding its origins and importance. Students will study Roman geography and culture to contextualize the myths, followed by an in-depth look at the chief deities Jupiter and Juno. The curriculum continues with an examination of Pluto, Proserpine, Neptune, and Mercury, and delves into various tales of transformation. The epic story of Aeneas is a focal point, starting with his role in the Trojan War, his journey, relationship with Dido, adventures in Sicily, and quest for the Golden Bough. The narrative progresses with Aeneas's descent into the underworld, the war in Italy, the founding of Rome, and the initial siege. Students will analyze the great battle, the end of the war, and the legendary tale of Romulus and Remus. The course also covers the story of the Sabine Women, Numa the Wise King, the House of Tarquin, the early Republic, and the rise of Rome. Additionally, students will explore the lives of Roman heroes and emperors, culminating in the myth of Apollo and Daphne. Interactive elements, including mp4 and mp3 resources, student activities, and Discovery Education materials, ensure a dynamic and engaging learning experience. This comprehensive approach allows students to develop a deep understanding of Roman mythology, enhancing their critical thinking and analytical skills while preparing them for advanced studies in literature and history.

#### SHORT STORIES PART I (1/2 CREDIT)

#### EMIS Code: 059999

In the ELA Short Stories I (High School Elective) course, students will explore a rich array of classic and contemporary short stories, enhancing their literary analysis, critical thinking, and comprehension skills. The course begins with Edgar Allan Poe's "The Tell-Tale Heart," delving into themes of guilt and madness, followed by O. Henry's "The Gift of the Magi," which explores themes of love and sacrifice. Jack London's "To Build a Fire" examines human versus nature, while P.G. Wodehouse's "The Aunt and the Sluggard" offers a humorous take on societal norms. Students will also read Washington Irving's "The Legend of Sleepy Hollow" and Ambrose Bierce's "An Occurrence at Owl Creek Bridge," both rich in American folklore and historical context. H.G. Wells' "The Country of the Blind" presents a thought-provoking narrative on perception and reality. The course includes James Thurber's "The Catbird Seat," Arthur Conan Doyle's "The Red-Headed League," and J.M. Barrie's "The Inconsiderate Waiter," each offering unique perspectives on human behavior and social commentary. Mark Twain's "The Celebrated Jumping Frog of Calaveras County" brings humor and regional dialect to the forefront, while Louisa May Alcott's "A Christmas Dream and How it Came True" imparts moral lessons. William Faulkner's "A Rose for Emily" and Sherwood Anderson's "Sophistication" provide deep dives into character studies and Southern Gothic themes. Katherine Anne Porter's "The Jilting of Granny Weatherall" and Bret Harte's "The Outcasts of Poker Flat" conclude the narrative exploration with themes of memory, regret, and

redemption. The course culminates in a final exam and includes various formats such as eBooks, PDFs, mp3s, and mp4s to accommodate diverse learning preferences, ensuring a comprehensive and engaging study of short stories.

#### SHORT STORIES PART II (1/2 CREDIT)

#### EMIS Code: 059999

In the ELA Short Stories II (High School Elective) course, students will deepen their literary analysis skills through a diverse selection of short stories, focusing on character change, point of view, vocabulary, text structure, and thematic elements. The course begins with an analysis of character change in "Athena and the Dandelions" and "Cracks of Gold," followed by character studies in "Recognition." Students will explore character point of view with Ray Bradbury's "All Summer in a Day," "A Man Who Had No Eyes," and "Saturday School." The curriculum includes exercises in finding the meaning of unknown words through stories like "Into the Rapids," "Charles," and "Black Blizzard." PAGE 41

Text structure is analyzed in "The Scholarship Jacket," "No-Guitar Blues," and "The Party." Students will identify and summarize themes in "Lucky Feet," "Matthias and the Dragons," and "The Wild Dog of Caucomgomoc," enhancing their understanding of narrative messages and moral lessons. Critical thinking is further developed by finding the best evidence in stories such as "Stray," "Thank You, M'am," and "Tornado Coming!" The course incorporates interactive resources like Edpuzzle, student activities, and provides materials in mp3, ebook, and PDF formats to cater to different learning styles. This comprehensive approach ensures students are well-equipped with advanced literary analysis skills, preparing them for higher-level English studies and fostering a deeper appreciation for literature.

### **MATHEMATICS**

#### INTEGRATED MATH I (1 CREDIT) - INTEGRATED MATH I A/B

#### EMIS Code: 110010 MATHIMI

In the MATH Integrated Math I (Grade 9) course, students will build a comprehensive understanding of fundamental mathematical concepts through a well-structured curriculum. The course begins with an introduction to integers, followed by an exploration of factors, powers, and square roots, providing a solid foundation in basic arithmetic operations. Students will then progress to mastering fractions, decimals, and scientific notation, enhancing their numerical fluency. The curriculum covers the real number system, equipping students with the knowledge to categorize and understand different types of numbers. Solving equations is a key focus, where students will learn techniques for finding solutions to various algebraic expressions. The study of ratios and proportions, along with basics of percent problems, prepares students for practical applications of mathematics in real-world scenarios. A mid-semester review ensures mastery of these concepts before advancing to more complex topics such as applications of percent, data processing, interpretation, and evaluation. Counting and probability units introduce students to fundamental principles of chance and statistics. The course also covers systems of measurement, geometric concepts involving points, lines, angles, circles, and properties of triangles. Students will explore polygons, quadrilaterals, sequences, and transformations, developing their spatial reasoning and geometric skills. Measurement topics like perimeter, circumference, area, surface area, and volume are thoroughly examined, along with the Pythagorean Theorem and right triangles. Concepts of scale drawings, similar figures, and right triangle trigonometry further enhance students' understanding of geometry. Another mid-semester PAGE 44

review reinforces the learning before moving on to exponents, polynomials, relations, and functions. The curriculum includes a detailed study of slope, linear equations, systems of equations (graphing, substitution, and elimination), inequalities, absolute value, and nonlinear functions. Throughout the course, interactive student activities, Edpuzzle, and Discovery Education resources ensure an engaging and supportive learning environment. This comprehensive approach prepares students for advanced mathematical studies by reinforcing critical concepts and skills, ultimately culminating in a final review at the end of each semester to ensure readiness for future mathematical challenges.

#### ALGEBRA I (1 CREDIT) – ALGEBRA I A/B

EMIS Code: 110301 MATHA1

In the MATH Algebra I (Grade 9) course, students will develop a solid foundation in algebraic concepts and skills through a comprehensive and structured curriculum. The course begins with an introduction to combining like terms and the distributive property, setting the groundwork for understanding algebraic expressions. Students will then progress to solving equations in two parts, learning essential techniques for isolating variables and finding solutions. The study of functions and graphing linear functions follows, where students will explore the concept of slope and how to write linear equations. The course also covers scatter plots to understand data distribution and relationships. A mid-semester review ensures mastery of these concepts before moving on to more complex topics such as systems of equations and systems of inequalities. The curriculum includes the multiplication properties of exponents, division and negative exponent properties, and the exploration of roots and rational exponents. Students will study exponential functions and learn about arithmetic and geometric sequences. The understanding of polynomials is deepened with units on multiplying and factoring polynomials, leading to solving equations involving polynomials. Graphing quadratic functions in various forms and solving quadratic equations using different methods, including the quadratic formula, are key components of the course. The study of function families and transformations broadens students' understanding of mathematical relationships and changes. The course also distinguishes between rational and irrational numbers and teaches students how to solve quadratic equations by graphing, factoring, and using square roots. Practical applications are highlighted through quadratic function word problems. Measures of center and spread, along with histograms, dot plots, and two-way tables, are covered to enhance students' data analysis skills. Throughout the course, interactive student practices, video tutorials, and resources like Discovery Education and Edpuzzle ensure an engaging and supportive learning environment. The curriculum is designed to build a strong algebraic foundation, preparing students for advanced mathematics courses. The course culminates in a final review, reinforcing all concepts learned and ensuring students' readiness for further mathematical challenges.

#### INTEGRATED MATH II (1 CREDIT) - INTEGRATED MATH II A/B

EMIS Code: 110020 MATHIMII

In the MATH Integrated Math II (Grade 10) course, students will build on their foundational math skills through an extensive and structured curriculum. The course begins with an exploration of points, lines, planes, and angles, establishing the basics of geometry. Students will then delve into the coordinate plane and line segments, followed by a deeper study of coordinate geometry and logical reasoning. The curriculum includes properties of equality and the properties and proofs of segments and angles, enhancing students' understanding of geometric relationships. Various formulas are introduced, preparing students for practical applications. A mid-semester review ensures comprehension before moving on to more complex topics such as angles, transversals, parallel and perpendicular lines, and properties of triangles. The course emphasizes proving triangles congruent, exploring specialties with triangles, indirect proofs, and understanding inequalities and triangle inequalities. Students will study quadrilaterals, parallelograms, and rectangles, followed by a review and the first semester final. The second semester covers special parallelograms and guadrilaterals, ratios, proportions, and similar figures. Students will examine the proportional parts of similar triangles and the features of right triangles, including right triangle trigonometry. The curriculum includes a comprehensive study of circles, inscribed angles, tangents, secants, and special segments, as well as equations of circles. Another mid-semester review reinforces the learning. The course also covers polygons, tessellations, area calculations, and the applications of polygons and circles, followed by surface area and volume. Students will graph equations of lines, perform coordinate proofs, and study transformations and loci. The curriculum concludes with permutations and combinations, preparing students for the second

semester final. Interactive elements such as student activities, Discovery Education resources, and video online tutorials ensure an engaging and supportive learning environment. This comprehensive approach allows students to develop a deep understanding of integrated mathematical concepts, enhancing their critical thinking and problem-solving skills, and preparing them for advanced mathematical studies.

#### GEOMETRY (1 CREDIT) – GEOMETRY A/B

#### EMIS Code: 111200 MATHG

In the MATH Geometry (Grade 10) course, students will develop a thorough understanding of geometric principles through a detailed and structured curriculum. The course begins with the foundational tools of geometry, covering lines, planes, rays, segments, and angles. Students will then explore concepts of congruence and the angles formed by intersecting lines, followed by a study of parallel and transversal lines. An algebra review on the slope-intercept form prepares students for examining parallel and perpendicular lines. The curriculum delves into triangles, including the Triangle Sum Theorem and properties of isosceles and equilateral triangles, then progresses to polygons and the Polygon Angle Sum Theorem. Students will learn about transformations and their rules, ratios and proportionals, and the properties of similar and congruent figures. The first semester culminates in an exam that consolidates these topics. In the second semester, the focus shifts to trigonometry with right triangles, covering sine, cosine, tangent ratios, finding sides using trigonometric ratios, and inverse trigonometry. The course then covers circles, including identifying parts, calculating radius, diameter, and circumference, understanding arcs and central angles, inscribed angles, and determining the area of circles and sectors. Students will also learn to write equations of circles. The curriculum includes a comprehensive study of area calculations for squares, rectangles, triangles, and quadrilaterals, followed by volume calculations for prisms, cubes, cylinders, cones, spheres, and composite figures. The final units cover probability, including an introduction and set theory, as well as conditional and independent events. Interactive elements such as Edpuzzle, student activities, and Discovery Education resources ensure an engaging learning experience. The course culminates in a second semester exam, reinforcing all learned concepts and preparing students for advanced mathematical studies. This comprehensive approach ensures students gain a deep understanding of geometry, enhancing their critical thinking and problem solving skills.

#### INTEGRATED MATH III (1 CREDIT) - INTEGRATED MATH III A/B

#### EMIS Code: 110030 MATHIMIII

In the MATH Integrated Math III (Grade 11) course, students will build upon their algebraic and geometric knowledge through a comprehensive curriculum. The course begins with linear equations and progresses to equations in two variables, exploring the properties of parallel and perpendicular lines. Direct variation, solving equations and proportions, and understanding inequalities and absolute value equations are key early topics. Students will also revisit the order of operations and properties of exponents, which lay the groundwork for studying functions. A review session ensures mastery before moving on to systems of equations and linear inequalities, including solving systems of linear inequalities. The curriculum then delves into applications of matrices and solving systems with matrix equations. Quadratic functions, quadratic equations, and the zero-product property are thoroughly examined, followed by solving quadratic equations and working with complex numbers. Students will also explore curve fitting and quadratic inequalities, culminating in the first semester final. In the second semester, the course covers more quadratic functions, exponential growth and decay, logarithms, and natural logarithms, providing a comprehensive understanding of exponential and logarithmic relationships. Polynomial functions, including long division and synthetic division, are studied in depth, along with solving polynomial equations and the remainder and factor theorems. Rational expressions and equations, as well as radical expressions and equations, are key focuses. The geometric concepts of distance and midpoint formulas, parabolas, circles, ellipses, hyperbolas, and solving quadratic systems are explored, with a review of conic sections consolidating this knowledge. The curriculum also includes a thorough exploration of probability, covering the fundamental counting principle, permutations, combinations, and the analysis of independent and dependent events. Right triangle trigonometry is introduced to enhance students' understanding of trigonometric principles. Interactive elements such as student activities, Discovery Education resources, and online tutorials ensure an engaging and supportive learning environment. This comprehensive approach prepares students for advanced mathematical

studies, enhancing their critical thinking and problem-solving skills, and culminating in a final review at the end of each semester to ensure readiness for future mathematical challenges.

#### ALGEBRA II (1 CREDIT) – ALGEBRA II A&B

#### EMIS Code: 110302 MATHAII

In the MATH Algebra II (Grade 11) course, students will deepen their understanding of advanced algebraic concepts through a comprehensive curriculum. The course begins with linear equations, followed by solving equations and their applications, and then progresses to inequalities and absolute value equations. Students will enhance their skills with operations involving numbers and exponents, and study functions and their inverses. Special functions and transformations are covered to broaden their understanding of function behavior. The curriculum then delves into systems of equations and linear inequalities, including solving systems of linear inequalities. A mid-semester review ensures mastery of these concepts before introducing matrices and solving systems with matrix equations. Quadratic functions, solving quadratic equations, and complex numbers are key focuses, along with further exploration of guadratic functions and curve fitting with guadratic inegualities. In the second semester, students will explore exponential growth and decay, logarithmic functions, and natural logarithms, which provide a foundation for understanding exponential relationships. Polynomial functions, graphing and solving polynomial equations, and rational expressions are examined in depth. The curriculum includes solving rational expressions and equations, as well as radical expressions and equations. Geometric concepts are integrated with the study of distance and midpoint formulas, circles, parabolas, ellipses, and hyperbolas, along with solving quadratic systems. Circular trigonometry and advanced trigonometry topics are covered to enhance students' understanding of angles and periodic functions. The course also includes sequences and series, and a thorough exploration of probability, including the fundamental counting principle, permutations, combinations, independent and dependent events, conditional probability, and statistics. Throughout the course, interactive elements such as student activities, Discovery Education resources, and online tutorials ensure an engaging and supportive learning environment. This comprehensive approach prepares students for advanced mathematical studies, enhancing their critical thinking and problem-solving skills, and culminating in a final review at the end of each semester to ensure readiness for future mathematical challenges.

#### ADVANCED MATH (1 CREDIT) – ADVANCED MATH A&B

#### EMIS Code: 110099 MATHAM

In the MATH Advanced Math (Grade 12) course, students will delve into advanced mathematical concepts through a comprehensive and structured curriculum. The course begins with an algebra review, followed by graphing techniques and a review of conic sections. Students will explore sets and intervals, types of numbers, and number classifications, enhancing their understanding of foundational concepts. The curriculum covers relations and functions, graphing techniques for functions, and the use of graphing calculators. Students will study the inverse of a function and two special functions. The course includes solving systems of equations for points of intersection and an introduction to matrices, followed by matrices and systems of equations. Curve fitting, scatter plots, and regression are key topics, along with solving rational expressions and partial fraction decomposition. Radical equations and expressions, the nature of complex numbers, and a further investigation into complex numbers round out the first semester, which concludes with a comprehensive final exam. In the second semester, the curriculum delves into trigonometry, covering special right triangles, circular trigonometry, and graphing trigonometric functions. Students will explore inverse trigonometric functions, trigonometric identities, and double-angle and half-angle identities, along with the Law of Sines and the Law of Cosines. The course includes calculating the area of triangles and solving trigonometric equations. Polar coordinates, equations, and graphs are introduced, followed by graphing polar equations and exploring trigonometry in the complex plane. The curriculum also covers exponential expressions, an introduction to logarithms, and the applications of exponential and logarithmic functions, including the natural exponential and logarithm. Students will study sequences and series, infinite sequences and series, and convergent and divergent infinite series, along with mathematical induction and the binomial theorem. The course integrates interactive elements such as student activities and resources from Discovery Education to enhance engagement and understanding. This comprehensive approach ensures that students develop a deep understanding of advanced mathematical concepts, preparing them for higher education and future careers requiring strong mathematical skills. The course culminates in a second semester final exam, consolidating all learned concepts and ensuring students are well-prepared for their next steps in mathematics.

#### FINANCIAL MATH I (1 CREDIT) – A&B

#### EMIS Code: 110099 MATHFM

In the MATH Financial Math (Grade 12) course, students will gain a comprehensive understanding of practical financial skills through a structured and detailed curriculum. The course begins with a math review covering fractions, decimals, percent, and formulas to ensure students have the foundational skills needed for financial calculations. It progresses to topics such as gross pay, wages and salaries, tips and commission, and the distinction between employees and independent contractors. Students will learn about income taxes, payroll taxes, and how to calculate net pay. The curriculum also covers banking concepts, including savings accounts, types of savings accounts, checking accounts, and credit cards, along with the implications of debt. The first semester concludes with an exam to assess students' understanding of these concepts. In the second semester, the course delves into practical financial applications such as sales tax, discounts, rebates, and tips, as well as payment options and purchasing decisions. Students will explore the complexities of renting a home, buying a home (including mortgage, closing costs, escrow, and property tax), and buying and leasing a car. The curriculum then shifts to more advanced topics like net worth, investing, bonds, stocks, and mutual funds. Students will also learn about the basics of insurance, including automobile, health, and other types of insurance. The course integrates interactive elements such as student activities, Edpuzzle, and video tutorials to enhance engagement and understanding. This comprehensive approach ensures that students develop critical financial literacy skills, preparing them for real-world financial decision-making and challenges. The course culminates in a final exam that consolidates all learned concepts, ensuring students are well-prepared for their financial futures.

#### CALCULUS (1 CREDIT) – CALCULUS A&B

EMIS Code: 110099 MATHC

In the MATH Calculus (Grade 12) course, students will explore advanced mathematical concepts through a comprehensive and structured curriculum. The course begins with a review of fundamental concepts, followed by an indepth study of finding limits graphically, numerically, and analytically. Students will learn about one-sided limits and continuity, limits involving infinity, rates of change, and the tangent lines. The definition of a derivative is introduced, along with differentiation rules in two parts. The course then covers the differentiation of trigonometric functions and the use of calculators for evaluating derivatives. Applications of derivatives, the chain rule, implicit differentiation, and derivatives of inverse functions are key topics, as well as derivatives of exponential and logarithmic functions. Students will explore extreme values of functions, increasing and decreasing functions, and the relationship between functions, derivatives, and second derivatives. The first semester concludes with a comprehensive final exam. In the second semester, the curriculum delves into integrals, starting with an introduction to integrals, indefinite integrals, and definite integrals in two parts. Integration techniques such as substitution (pattern recognition), numerical integration, and the natural log function are covered, along with applications to growth and decay. Students will also learn to use calculators for integration, explore integration by parts, and calculate areas in a plane using the disc and washer methods for both horizontal and vertical rotations. The study of sequences, L'Hôpital's rule, and slope fields are also included. The course integrates interactive elements such as video tutorials and resources from Discovery Education to enhance engagement and understanding. This comprehensive approach ensures that students develop a deep understanding of calculus, preparing them for higher education and future careers requiring advanced mathematical skills. The course culminates in a second semester final exam, consolidating all learned concepts and ensuring students are well-prepared for their next steps in mathematics.

### **SCIENCE**

#### **BIOLOGY (1 CREDIT) – BIOLOGY A&B**

EMIS Code: 132330 SCIB

In the SCI Biology (Grade 10) course, students will embark on a comprehensive journey through the study of living organisms, starting with an introduction to biology and the characteristics of all living things. The curriculum covers the scientific method, the interplay between science, society, and technology, and dives into the fundamentals of

biomolecules and cell biology. Students will explore processes such as photosynthesis, cellular respiration, mitosis, and meiosis, and study DNA, gene expression, and mutations. The course includes a thorough examination of heredity, from monohybrid and dihybrid crosses to sex-linked traits and pedigrees. Additionally, students will learn about ecosystems, energy flow, cycling of matter, population dynamics, evolution, and taxonomy. Interactive tools like Quizlet, BrainPOP, Discovery Education, and Britannica Learn will be utilized to enhance engagement and understanding, with comprehensive reviews at the end of each semester to solidify their knowledge.

#### PHYSICAL SCIENCE (1 CREDIT) – PHYSICAL SCIENCE A&B

#### EMIS Code: 132220

In the SCI Physical Science (Grade 9) course, students will explore fundamental scientific concepts through a comprehensive curriculum that begins with the scientific method and lab safety. The course covers the history and formation of the universe, including galaxy formation and the life cycle of stars. Students will delve into topics such as significant figures, different forms of energy, the conservation and transfer of energy, and the principles of nuclear and radiant energy. The course also includes detailed studies on wave properties, electricity, series and parallel circuits, and the engineering design cycle. Additional units focus on the classification and properties of matter, atomic models, chemical bonding, motion, and forces. Interactive tools like Quizlet, BrainPOP, Discovery Education, and Britannica Learn will be utilized to enhance engagement and understanding. Comprehensive semester exams will ensure students grasp the essential principles of physical science.

#### CHEMISTRY (1 CREDIT) – CHEMISTRY A&B

EMIS Code: 130301

In the SCI Chemistry (Grade 11) course, students will explore the essential concepts and principles of chemistry, beginning with an introduction to the field and the methodologies used to study it. The course covers the description and types of matter, phases and changes of matter, and the historical and modern models of the atom. Students will delve into electronic configurations, the periodic table, and the mole concept, followed by an in-depth study of ionic and covalent bonding and nomenclature. The course also includes topics on intermolecular forces, classifying and balancing chemical reactions, and the mathematical analysis of these reactions. Further units cover energy changes in chemical reactions, solution chemistry, acid-base chemistry, and the kinetic molecular theory. The curriculum concludes with empirical and ideal gas laws, kinetics, and equilibrium. Virtual labs from Explore Learning and Discovery Education will be utilized throughout the course to enhance student engagement and understanding. Comprehensive quarterly exams will ensure a solid grasp of the material.

#### ENVIRONMENTAL SCIENCE (1 CREDIT) - ENVIRONMENTAL SCIENCE A&B

#### EMIS Code: 132350 SCIESES

In the SCI Environmental Science (HS Elective) course, students will explore the fundamental principles and methodologies of environmental science, beginning with an introduction to the field and its study methods. The curriculum covers ecological organizations, niches, and adaptations, along with food chains and ecological succession. Students will examine relationships within populations and communities, including feeding relationships and symbiosis. The course addresses human population growth and the impacts on land, air, and water resources, along with the pressing issue of climate change and its effects. Topics on non-renewable and renewable resources are also explored, emphasizing the importance of sustainability and practical ways to practice it. Interactive learning is enhanced through GIZMOS, with comprehensive semester exams ensuring a thorough understanding of environmental science concepts.

#### PHYSICS (1 CREDIT) – PHYSICS A&B

EMIS Code: 130302 SCIP

In the SCI Physics (Grade 12) course, students will embark on a comprehensive study of the fundamental principles of physics, beginning with an introduction to the subject and an exploration of motion in one dimension. The curriculum covers projectile motion, forces and Newton's laws of motion, and the concepts of friction and circular motion. Students will delve into gravitational motion, energy, and linear momentum, followed by units on rotational motion, fluids, waves, and sound. The course also explores the properties of light and the electromagnetic spectrum, electric charges, electric current, and circuits. Virtual labs from Explore Learning and Discovery Education will be utilized throughout the course to enhance student engagement and understanding. Comprehensive reviews and exams at the end of each semester will ensure a solid grasp of the material.

### SOCIAL STUDIES

#### WORLD HISTORY (1 CREDIT) - WORLD HISTORY A&B

EMIS Code: 150890 SSWH

In the SS World History (Grade 11) course, students will explore the profound transformations in human history from the Enlightenment to the present day. The course covers pivotal events such as the Industrial Revolution, both World Wars, the Russian Revolution, the Cold War, the decolonization of Africa and India, and the rise of multinational organizations. Students will examine the impact of scientific advancements, imperialism, and global conflicts, while also delving into significant social changes like the struggle to end apartheid and the liberation movements in Latin America. Modern global issues, such as terrorism and the shift to a multipolar world, are also addressed. The course integrates interactive activities from Discovery Education and Britannica Learn to enhance student engagement and understanding, culminating in comprehensive semester examinations.

#### AMERICAN HISTORY (1 CREDIT) - AMERICAN HISTORY A&B

EMIS Code: 150810 SSAH

In the SS American History (Grade 9) course, students will explore the rich tapestry of American history from its founding to contemporary times. Beginning with foundational documents like the Declaration of Independence and the U.S. Constitution, students will delve into pivotal periods such as westward expansion, industrialization, and the Cold War. Through a combination of historical analysis, critical thinking, and interactive activities using platforms like Edpuzzle, Discovery Education, and Britannica Learn, students will develop essential skills in assessing credibility, constructing theses, and understanding causation and correlation, while also examining key events, social transformations, and shifts in American society.

#### AMERICAN GOVERNMENT I (1/2 CREDIT)

EMIS Code: 150300 SSAGI

In the SS American Government (Grade 10) course, students will embark on a comprehensive exploration of the fundamental principles and structures of the United States government. From civic participation and the basic principles of the Constitution to the intricacies of federalism and the rights and responsibilities of citizens, students will analyze primary sources such as the Federalist and Anti-Federalist Papers, the Bill of Rights, and key constitutional amendments. Through interactive activities facilitated by platforms like Edpuzzle, Discovery Education, and Britannica Learn, students will not only gain a deep understanding of the three branches of government but also examine contemporary public policy issues, economic growth, and the role of individuals and organizations in shaping governmental decisions. Throughout the course, emphasis will be placed critical thinking, civic responsibility, and an appreciation for the complexities of democratic governance.

#### ECONOMICS (1/2 CREDIT)

EMIS Code: 150600 SSE

In the SS Economics (HS Elective) course, students will embark on a comprehensive journey through the fundamental principles and intricate dynamics of economics. From thinking like an economist and understanding cost versus benefit to exploring different economic systems and the forces of demand and supply, students will delve into the core concepts that drive economic decision-making. They will analyze primary sources and case studies, examining topics such as market competition, government intervention, and the role of money in the economy. Through interactive activities facilitated by platforms like Edpuzzle and Discovery Education, students will gain a deep understanding of personal finance, the stock market, economic crises, and international trade. Throughout the course, emphasis will be placed on critical thinking, informed decision-making, and an appreciation for the complexities of economic systems and policies. Students will also explore various careers in economics, preparing them for future academic and professional pursuits in the field.

#### GEOGRAPHY (1/2 CREDIT)

#### EMIS Code: 150700 SSWG

In the SS World Geography (HS Elective) course, students will embark on a comprehensive exploration of Earth's physical and human landscapes, from understanding latitude and longitude to studying continents, oceans, and geographic features. They will examine mountain ranges, rivers, and the relationship between landforms and human activity. Through interactive activities facilitated by Britannica Learn, Edpuzzle, and student interactivities, students will explore the dynamic interactions between humans and the environment, including human impacts on Earth systems and migration patterns. The course will cover the definition and characteristics of regions and cultural landscapes, providing insights into global cultures, demographics, and development. Students will analyze globalization and political divisions, gaining an understanding of global interconnections. The course will also focus on specific regions, including the United States, Canada, Mexico, and Central America, offering detailed looks at their geographic and cultural attributes. Emphasis will be placed on critical thinking, spatial awareness, and appreciating the diverse, interconnected world. By the end, students will have a comprehensive understanding of world geography, preparing them for further studies and informed global citizenship.

#### PSYCHOLOGY (½ CREDIT)

#### EMIS Code: 151121 SSPSYC

In the SS Psychology (HS Elective) course, students will delve into the fascinating study of the human mind and behavior, starting with the foundational question, "What is Psychology?" The course traces the history and evolution of psychology, explores contemporary psychological practices, and examines the brain's control over thoughts, feelings, and behavior. Key topics include consciousness, the importance of sleep, substance use and abuse, and various learning theories such as classical and operant conditioning. Students will also explore memory functions and the nature of aggression. Interactive activities, including Edpuzzle and Open Educational Sources, will enhance student engagement and understanding. Comprehensive examinations will ensure students gain a deep understanding of psychological concepts and their applications.

#### SOCIOLOGY (½ CREDIT)

#### EMIS Code: 151300 SSSOCL

In the SS Sociology (HS Elective) course, students will explore the intricate dynamics of societies and human interactions, beginning with the foundational story and history of sociology. The course covers various theoretical perspectives, the importance of studying sociology, and the concept of culture, including its elements, pop culture, subculture, and cultural change. Students will delve into agents of socialization, theories of self-development, and social constructions of reality. Topics such as global wealth and poverty, social stratification and mobility in the United States, and issues related to race, ethnicity, and intergroup relationships are also examined. Interactive activities, including Edpuzzle and Open Educational Sources, will be utilized to enhance student engagement and understanding. Comprehensive examinations will ensure a deep grasp of sociological concepts and their real-world applications.

### FINANCIAL LITERACY

#### FINANCIAL LITERACY (½ CREDIT)

EMIS Code: 153001 BUSFL

In the SS Financial Literacy (HS Elective) course, students will embark on a comprehensive exploration of essential financial principles and practices. From understanding the basics of financial literacy and setting personal financial goals to mastering budgeting and banking, students will gain practical skills to manage their finances effectively. They will delve into critical topics such as using credit wisely, building a strong credit history, and protecting their money from fraud and identity theft. Through interactive activities facilitated by platforms like Edpuzzle and Discovery Education, students will explore various facets of earning money, including careers, entrepreneurship, and wages. They will also learn about the importance of insurance, taxes, and consumerism, as well as making informed decisions when buying a car. The course culminates with an examination of investing and philanthropy, encouraging students to plan for their financial future. Emphasis will be placed on critical thinking, informed decision-making, and an appreciation for the complexities of financial management. Throughout the course, students will be prepared for real-world financial challenges and opportunities, empowering them to make sound financial decisions in their personal and professional lives.

#### PERSONAL FINANCE (1/2 CREDIT)

EMIS Code: 153001 BUSPF

In the SS Personal Finance (Grade 12 Elective) course, students will embark on a comprehensive understanding of personal finance, equipping students with essential skills to manage their financial future effectively. Students will explore fundamental concepts such as distinguishing between wants and needs, understanding financial services, and leveraging mobile banking. The curriculum delves into earning potential, financing education, and preparing for the workforce. Key topics include navigating taxes, finding and managing savings, using credit wisely, and managing debt. Students will also learn to make major financial decisions, understand consumer rights, and strategies for growing and protecting their finances. The course includes periodic reviews to reinforce economic principles and ensure a thorough grasp of personal finance management.

### **ELECTIVES**

### **FINE ARTS**

#### ART HISTORY (½ CREDIT)

#### EMIS Code: 020101 FAAH

In FA Art History(HS Elective), students are shown an extensive overview of art history, starting with prehistoric art and progressing through significant periods and styles. It covers Hellenistic and early Christian art, early Islamic and Asian art, and the evolution of Italian art from its early stages to the High Renaissance. It examines the Northern Renaissance, Mannerism, Baroque art, Rococo, and Neoclassicism, as well as colonial American and Japanese art. The course explores the Romanticism and early 19th-century art movements, Realism, the Pre-Raphaelites, Impressionism, Symbolism, and Art Nouveau. It continues with early 20th-century art, Cubism, Futurism, Abstract art, and Surrealism, culminating in the study of Pollock, Pop art, new media, and includes a final exam to consolidate learning.

#### HISTORY OF JAZZ (1/2 CREDIT)

EMIS Code:129999 FAHJ

In FA History of Jazz (9-12 Elective), students will learn all about jazz music, starting with key music vocabulary before diving into the evolution of jazz. It covers the origins of early jazz and highlights iconic figures such as Louis Armstrong and Duke Ellington. It explores various jazz styles, including the Big Band era, Bebop with artists like Dizzy Gillespie and Charlie Parker, Cool Jazz, and Free Jazz with John Coltrane. The curriculum also examines jazz fusion, modern jazz, and notable musicians like Miles Davis, Herbie Hancock, Trombone Shorty, and Wynton Marsalis. The course wraps up with a final exam to assess understanding. This course incorporates interactive activities from BrainPop to enhance student learning.

#### HISTORY OF ROCK & ROLL (1/2 CREDIT)

EMIS Code: 129999 FAHRR

In FA History of Rock & Roll (9-12 Elective), students cover content on music vocabulary and the fundamentals of rock music, featuring influential figures such as James Brown, Elvis Presley, Stevie Wonder, Bob Dylan, Jimi Hendrix, and Kurt Cobain. It explores various genres and movements, including rockabilly, Motown, the British Invasion, folk rock, and psychedelic rock. The curriculum examines music from the 1960s through the 1990s, highlighting notable artists like Led Zeppelin, Michael Jackson, and Kurt Cobain. The course concludes with popular music and technology developments of the 21st century that allow greater access to music and a final exam to assess student's learning.

#### **MUSIC APPRECIATION (1/2 CREDIT)**

#### EMIS Code: 120800 FAMA

In FA Music Appreciation (HS Elective), students are offered a thorough overview of music appreciation, starting with an introduction and covering significant periods such as the Renaissance, Baroque, Classical, and Romantic eras. It includes reviews and evaluations, and explores 20th-century music, jazz, American musical theater, and world music. The course also delves into rock and roll, examines careers in music, and culminates with a final exam to assess understanding and knowledge gained throughout the course.

#### **RENAISSANCE ART (1/2 CREDIT)**

EMIS Code: 029999 FARA

In FA Renaissance Art (HS Elective), students explore the Renaissance period in art, starting with an overview and then examining pre-Renaissance art. It focuses on key figures such as Fra Angelico, Botticelli, Michelangelo, Raphael, and Leonardo da Vinci. The course covers the use of line, shape, form, color, value, and space by Renaissance artists, along with the architecture of Italy, including basilicas and cathedrals. It also discusses the materials and methods used by these artists, the broader world of the Renaissance, and the transition to the Baroque period, concluding with a look at artists influenced by the Renaissance.

### **HEALTH/PHYSICAL EDUCATION**

#### HEALTH (1/2 CREDIT)

EMIS Code: 260101 HEH

In this eighteen-unit course, students will gain a comprehensive understanding of human anatomy and healthrelated topics. The curriculum covers a wide range of subjects, including the structure and function of blood cells, the digestive system, bones, muscles, joints, the excretory system, the immune system, and the respiratory system. Additionally, students will explore lessons on alcohol and tobacco use, the effects of various drugs, and the impact of sexually transmitted diseases. The course also includes nutritional education, focusing on the nutritional value of food and understanding allergies. Practical lessons from the SAVE (Substance Abuse and Violence Education) program are integrated to enhance students' awareness and decision-making skills related to health and wellness.

#### PHYSICAL EDUCATION I (1/2 CREDIT)

EMIS Code: 080300 HEPE

In In this eighteen-unit course, students will be introduced to the fundamentals and benefits of physical education. The curriculum emphasizes the importance of physical activity, fitness principles, and maintaining an active lifestyle. Students will learn about the essential nutrients their bodies need, the significance of safety during physical activities, and strategies for managing stress. The course also includes presentations on standard physical education guidelines and in-depth modules on substance abuse, such as AlcoholEdu and marijuana education. Through this course, students will develop a healthier understanding of their bodies, the impact of exercise, and the choices that contribute to overall wellness.

### FOREIGN LANGUAGE

### <mark>SPANISH</mark>

#### SPANISH I (1 CREDIT) – SPANISH I A/B

EMIS Code: 060265 LANGSI

In this course consisting of thirty-six units, students develop knowledge and skills to begin communicating in the target language. They speak, listen to, read, and write the language in short sentences and paragraphs that contain the learned vocabulary words and phrases. Students also gain insight into the target culture by examining literature, music, laws, foods, values, traditions, and behaviors.

#### SPANISH II (1 CREDIT) – SPANISH II A/B

EMIS Code: 060265 LANGSII

In this course consisting of thirty-six units, students participate in simple, conversational situations using sentences and groups of sentences. They create the target language by combining and recombining learned phrases and words. Students write simple messages, read texts dealing with familiar topics, and understand the main ideas when listening to conversations dealing with familiar topics or themes. Students also gain awareness, understanding of, and appreciation for cultural contributions made by people of the target language.

#### SPANISH III (1 CREDIT) – SPANISH III A/B

EMIS Code: 060265 LANGSII

This course, consisting of thirty-six units, is offered to students interested in pursuing greater fluency in reading, writing, speaking, and understanding the target language. The students are required to recall previously learned words and phrases and to build upon them as they learn to create more native-like writing and conversation. This course also continues a more intense study of grammar and appreciation for cultural contributions made by people of the target language.

#### SPANISH IV (1 CREDIT) – SPANISH IV A/B

EMIS Code: 060265 LANGSIV

This course, consisting of thirty-six units, is offered to those students interested in becoming proficient in reading, writing, speaking, and understanding the target language. The students are required to review all grammatical structure and to recall previously learned vocabulary. They strive for a native-like, proficiency level, and continue a more intense study of cultural aspects, including art and literature. Students demonstrate their understanding of and appreciation for these cultural works by discussing them in the target language.

### **FRENCH**

#### FRENCH I (1 CREDIT) – FRENCH I A/B

#### EMIS Code: 060230 LANGFI

In this course consisting of thirty-six units, students develop the knowledge and skills to begin communicating in the target language. They speak, listen, read, and write the language in short sentences and paragraphs that contain the learned vocabulary, words, and phrases. Students also gain insight into the target culture by examining literature, music, laws, foods, values, traditions, and behaviors.

#### FRENCH II (1 CREDIT) - FRENCH II A/B

#### EMIS Code: 060230 LANGFII

In this course consisting of thirty-six units, students participate in simple, conversational situations using sentences and groups of sentences. They create the target language by combining and recombining learned phrases and words. Students write simple messages, read texts dealing with familiar topics, and understand the main ideas when listening to conversations dealing with familiar topics or themes. Students also gain an awareness and understanding of, and appreciation for, cultural contributions made by people of the target language.

#### FRENCH III (1 CREDIT) - FRENCH III A/B

EMIS Code: 060230 LANGFIII

In this course consisting of thirty-six units, students initiate and sustain conversations by making statements, asking questions, and giving appropriate responses. They communicate using correct time frames on everyday topics, both orally and in writing. When writing, students compose cohesive paragraphs related to familiar topics and personal experiences. Students develop an understanding of main ideas and significant details in extended discussions and presentations, both live and recorded. They acquire new knowledge and information from texts, including short literary texts and media. Students continue to expand their knowledge and under-standing of the cultural significance of the target language.

#### FRENCH IV (1 CREDIT) – FRENCH IV A/B

#### EMIS Code: 060230 LANGFIV

In this course consisting of thirty-six units, students speak and write in French. They learn to initiate, sustain, and bring to closure a wide variety of communicative tasks using appropriate time frames. They expand comprehension skills that allow them to acquire knowledge and information from authentic texts, including literary texts and media. Students continue to develop insight into the nature of the French language and culture.

# **GRADE 7-8**

ELA English 170 A/B COURSE NUMBER: ELA07 ELACR07 EMIS CODE: 050156

In the ELA English 170 (7th grade) course, students will develop their reading, writing, and language skills through a comprehensive curriculum. This course covers reading comprehension and analysis of various literary genres, as well as writing processes for argumentative, informative, and literary analysis essays. Each unit includes grammar and language conventions, complemented by interactive activities and video tutorials. Students will read, analyze, and respond to texts such as argumentative writings, historical documents, poetry, short stories, and dramas, all provided to prepare for the 7th Grade English Language Arts Assessment. Additionally, the course includes books in PDF and ebook format to enhance understanding and engagement.

ELA English 180 A/B COURSE NUMBER: ELA08 ELACR08 EMIS CODE: 050156 CREDIT: 1

In the ELA English 180 (8th grade) course, students will develop their reading, writing, and language skills through a comprehensive curriculum. This course covers reading comprehension and analysis of various literary genres, as well as writing processes for argumentative, informative, and literary analysis essays. Each unit includes grammar and language conventions, complemented by interactive activities and student essays. Students will read, analyze, and respond to texts such as argumentative writings, historical documents, poetry, short stories, and dramas, all provided to prepare for the state English Language Arts Assessment. Additionally, the course includes books in PDF and ebook format to enhance understanding and engagement.

MATH Math 170 A/B COURSE NUMBER: MATH07 MATHCR07 EMIS CODE: 110175 CREDIT: 1

In the Math 170 (7th grade) course, students will develop their mathematical skills through a comprehensive curriculum covering a wide range of topics. These include addition and subtraction of integers, rational numbers, proportions, equations, percents, and algebraic expressions. The course also explores multi-step problems, inequalities, and various geometry topics such as similar figures, triangles, quadrilaterals, circles, angles, area, volume, and surface area. Students will engage with statistics and probability through interactive activities, BrainPOP, and Quizlet resources. Each unit is designed to ensure a thorough understanding and application of the material, enhancing lessons with student interactivities.

#### MATH Math 180 A/B

COURSE NUMBER: MATH08 MATHCR08 EMIS CODE: 110175 CREDIT: 1

In the Math 180 (8th grade) course, students will develop their mathematical skills through a comprehensive curriculum covering a wide range of topics. These include integer operations, combining like terms, solving equations, functions, and proportional relationships. The course also explores graphing linear functions, slope and rate of change, systems of equations, properties of exponents, scientific notation, and rational vs. irrational numbers. Students will engage with geometry concepts such as angle relationships, the Pythagorean theorem, and volume calculations. Additionally, transformations, measures of center and variation, scatter plots, and two-way tables are

covered. The course utilizes Desmos calculators, Generation Genius as a supplement, and BrainPOP for interactive learning, ensuring a thorough understanding and application of the material.

#### SCI Science 170 A/B COURSE NUMBER: SCI07 SCICR07 EMIS CODE: 132130 CREDIT: 1

In the Science 170 (7th grade) course, students will develop their scientific skills through a comprehensive curriculum covering a wide range of topics. These include the variety of life in animals, fungi, and seaweed, interdependence of organisms, and the relationship between resources and organisms in rainforests and biomes. The course also explores the effects of overpopulation, natural and human activities impacting ecosystems, photosynthesis, and food chains. Students will engage with energy concepts, scientific variables, Earth's spheres and cycles, global warming, and weather phenomena. The course includes lab activities using normal household items, ensuring a thorough understanding and application of scientific concepts, and emphasizes scientific inquiry and the role of technology in environmental and economic contexts.

SCI Science 180 A/B COURSE NUMBER: SCI08 SCICR08 EMIS CODE: 132130 CREDIT: 1

In the Science 180 (8th grade) course, students will develop their scientific skills through a comprehensive curriculum covering a wide range of topics. These include life science concepts such as fossils, natural selection, extinction, genetics, and the beginning of life. The course also explores earth science topics including Earth's interior, seismic waves, continental drift, seafloor spreading, tectonic plates, and the age of Earth. Students will engage with physical science concepts like gravitational, electrical, and magnetic forces, motion, friction, and representing forces. Additionally, the course covers sustainability topics, focusing on global resources, biodiversity, and climate change. The course includes EVERFI lessons and a science journal in each unit, ensuring a thorough understanding and application of scientific concepts.

SS Social Studies 170 A/B COURSE NUMBER: SS07 SSCR07 EMIS CODE: 151201 CREDIT: 1

In the Social Studies 170 (7th grade) course, students will explore a wide variety of events, people, and decisions that have shaped the world from Ancient Greece to the First Global Age. The course begins with the geography and city-states of Ancient Greece, the rise and fall of the Roman Empire, and the spread of Christianity and Islam. It continues through the Middle Ages, covering the feudal system, the Renaissance, and the Protestant Reformation. Students will study significant African empires, the Mughal Empire in India, the Ottoman and Safavid Empires, and the Mongol influence in Asia. Additionally, the course covers the Age of Exploration, the competition for colonies, and the Columbian Exchange. Each unit includes interactive activities, historical articles, and dinner discussions to engage family participation and deepen understanding. The course emphasizes the importance of historical events in shaping our present and future, helping students understand the global community in which they live.

SS Social Studies 180 A/B COURSE NUMBER: SS08 SSCR08 EMIS CODE: 151201 CREDIT: 1

In the Social Studies 180 (8th grade) course, students will explore the series of events, decisions, and ideas that shaped the development of the United States of America. From its colonial roots to the aftermath of the Civil War, the course covers the fascinating story of the country's first centuries and the contributions of many notable figures. Students will delve into the establishment of colonies, the Revolutionary War, the creation of the Constitution, and the growth of the young republic. The course also examines the Industrial Revolution, westward expansion, the Civil War, and Reconstruction. Each unit includes historical articles and dinner discussions to engage family participation, providing a comprehensive understanding of American history and government. Additionally, students will have the opportunity to read excerpts from significant documents that form the basis of American government, enhancing their grasp of the nation's foundational principles.

LANG Spanish 170 A/B COURSE NUMBER: LANGS170 EMIS CODE: 060265 CREDIT: 1

In the Spanish 170 (7th grade) course, students will be introduced or re-introduced to skills for beginning or resuming communication in Spanish. They will gain knowledge and understanding of pronunciation, vocabulary, grammar structure, and simple conversation. The course also explores the cultures of Spanish-speaking countries, including music, dance, art, sports, literature, cuisine, and festivals. Students will engage with various interactive activities to practice their language skills and deepen their cultural understanding. Required course materials include the Read Aloud Chrome Extension, foreign language accent codes for Chromebook users, and the Online Voice Recorder extension for recording audio files. The course aims to build a strong foundation in both the language and cultural appreciation, preparing students for more advanced studies in Spanish.

LANG Spanish 180 A/B COURSE NUMBER: LANGS180 EMIS CODE: 060265 CREDIT: 1

In the Spanish 180 (8th grade) course, students will be introduced or re-introduced to skills for beginning or resuming communication in Spanish. Students will gain knowledge and understanding of vocabulary, grammar structure, pronunciation, and conversation. The course also explores the cultures of Spanish-speaking countries, including music, dance, art, literature, cuisine, and traditions. Enrichment activities will challenge more advanced students, ensuring a comprehensive learning experience. Required course materials include the Read Aloud Chrome Extension, foreign language accent codes for Chromebook users, and the Online Voice Recorder extension for recording audio files. The course aims to build a strong foundation in both the language and cultural appreciation, preparing students for more advanced studies in Spanish.