# Lakeside Learning Center Course Descriptions Catalog

Includes ALL Courses offered by LLC.

All Courses can be Customized And Prescriptive and Pre-Testing Options are available.

To Add or Change a course Contact:

Lakeside Learning Center 2913 Ave D, Wilson, Kansas 785-658-2460

# English/Language Arts Course Descriptions

# **English/Language Arts 6 (Required)**

**Course Number: ELA3006** Prerequisite Courses: 5<sup>th</sup> Grade English or Equiv. **Course Description** 

This course eases students' transition to middle school with engaging, age-appropriate literary and informational reading selections. Students learn to read critically, analyze texts, and cite evidence to support ideas as they read essential parts of literary and informational texts and explore a full unit on Lewis Carroll's classic novel Through the Looking Glass. Vocabulary, grammar, and listening skills are sharpened through lessons that give students explicit modeling and ample practice. Students also engage in routine, responsive writing based on texts they have read, In extensive, process-based writing lessons, students write topical essays in narrative, informative, analytical, and argumentative formats. In this full-year course, students develop a mastery of reading, writing, and language arts skills.

# **English Language Arts 7 (Required)**

Course Number: ELA3007

Prerequisite Courses: English Language Arts 6 **Course Description** 

Students grow as readers, writers, and thinkers in this middle-school course. With engaging literary and informational texts, students learn to think critically, analyze an author's language, and cite evidence to support ideas. Students complete an in-depth study of Jack London's classic novel White Fang, and read excerpts from other stories, poetry, and nonfiction. Explicit modeling and ample opportunities for practice help students sharpen their vocabulary, grammar, and listening skills. Student s also respond routinely to texts they have read. In extensive, process-based writing lessons, students write topical essays in narrative, informative, analytical, and argumentative formats. In this full-year course, students develop a mastery of reading, writing, and language arts skills.

# **English Language Arts 8 (Required)**

**Course Number: ELA3008** Prerequisite Courses: English Language Arts 7 **Course Description** 

In this course, students build on their knowledge and blossom as thoughtful readers and clear, effective writers. A balance of literary and informational text engages students throughout the course in reading critically, analyzing texts, and citing evidence to support claims. Students sharpen their vocabulary, grammar, and listening skills through lessons designed to provide explicit modeling and ample opportunities to practice. Students also routinely write responses to texts they have read, and use more extensive, process-based lessons to produce full-length essays in narrative, informative, analytical, and argumentative formats. In this full-year course, students develop a mastery of reading, writing, and language arts skills.

Grade level: 6 Credits: 1.0

Grade level: 7 Credits: 1.0

Grade level: 8

Credits: 1.0

# English 1 (Required)

Course Number:ELA2064 Prerequisite Courses: English Language Arts 8 <u>Course Description</u>

Dedicated to creating effective and adaptable readers and writers, ELA2064 provides rigorous training in the foundations of English Language Arts skills and strategies. Using the core foundation, the course expands on and applies traditional concepts to modern, 21st-century demands. Offering practical lessons in techniques such as visualizing, making inferences and predictions and recognizing, organizational patterns in online and offline texts, this course delivers hands-on training in applying the writing process, evaluating essays, and using MLA style and documentation. Over the course of two semesters, interactive grammar lessons will strengthen students' grasp of language and improve writing skills.

# **English 2 (Required)**

Course Number: ELA2064 Prerequisite Courses: English 1 Course Description

Focused on application, this sophomore English course reinforces literary analysis and 21st-century skills with superb pieces of literature and literary nonfiction, application e-resources, and educational interactives. Each thematic unit focuses on specific literary analysis skills and allows students to apply them to a range of genres and text structures. As these units meld modeling and application, they also expand on training in media literacy, 21st-century career skills, and the essentials of grammar and vocabulary. Under the guidance of the eWriting software, students will also compose descriptive, persuasive, expository, literary analyses, research, narrative, and compare-contrast essays.

# **English 3 (Required)**

Course Number: ELA3011 Prerequisite Courses: English 2 Course Description

This junior-year English course invites students to delve into American literature, from early American Indian voices through thoughtful contemporary works. Students will engage in literary analysis and inferential evaluation of great texts, the centerpieces of this course. While critically reading fiction, poetry, drama, and expository nonfiction, students will master comprehension and literary-analysis strategies. Interwoven in the lessons across two semesters are tasks that encourage students to strengthen their oral language skills and produce creative, coherent writing. Students will read a range of short but complex texts, including works by Ralph Waldo Emerson, Emily Dickinson, Herman Melville, Nathaniel Hawthorne, Paul Laurence Dunbar, Martin Luther King, Jr., F. Scott Fitzgerald, Sandra Cisneros, Amy Tan, and Dave Eggers.

#### **English 4 (Required)**

Course Number: LA1094 Prerequisite Courses: English 3 Course Description

Covering an interesting and expansive time period, this course offers fascinating insight into British literary traditions spanning from Anglo-Saxon writing to the modern period. With interactive introductions and historical contexts, this two-semester course connects philosophical, political, religious, ethical, and social authors, including Chaucer, William Shakespeare, Queen Elizabeth I, Elizabeth Barrett Browning, and Virginia Woolf. Adding an extra dimension to the British literary experience, this course also exposes students to world literature, including works from India, Europe, China, and Spain.

Grade level: 12 Credits: 1.0

Grade level: 11 Credits: 1.0

Grade level: 10

Credits: 1.0

Grade level: 9 Credits: 1.0

# Social Sciences Course Descriptions

#### **MS Civics, Economics, and Government**

Course Number: SS2049 Prerequisite Courses: None **Course Description** 

Exploring the structure of the United States government on a national, state, and local level, this course challenges students to learn and understand fundamental concepts and philosophies that led to the creation of the United States Constitution. Students enrolled in this two-semester course analyze the political process, political parties, and influences that affect them both. Engaging, interactive content introduces economic concepts and encourages students to explore government and economics on a global scale. By instilling a thorough understanding of government and economics, this course inspires students to investigate what it means to be an American citizen.

#### **MS US History**

Course Number: SS2049 Prerequisite Courses: None **Course Description** 

Offering an interactive and comprehensive overview of American history, this course engages and inspires students to learn about the rich and diverse history of America's native peoples, early European colonization and settlement in America, and the creation of a new nation through the American Revolution. Middle school students enrolled in this course will closely examine major changes brought about by the nation's reconstruction, industrialization, urbanization, and progressive reforms and consider the implications each of these events had on the expansion of the United States' global influence through modern times. Over the course of two semesters, interesting course content encourages students to think carefully about the challenges and opportunities facing the United States in the 21st century.

# World Cultures and Geography

Course Number:SS2041	Grade level:
Prerequisite Courses: None	Credits:1.0
<u>Course Description</u>	

Designed to introduce students to the study of geography, this course helps students master important concepts in physical and human geography. Comprehensive and organized by region, this two-semester middle school course helps students understand the Earth's physical and human diversity. Students analyze population and settlement patterns and evaluate the ways that human activities modify the physical environment. While studying humans around the world, students compare development, standards of living, systems of government, and economic factors across the globe. In addition, students gain a rich understanding of global cultures and the historical factors that have shaped the world around them. All units in the course are parallel and include studies in physical and human geography, ancient cultures, regional studies, and modern issues.

Grade level:6

Grade level: 7 Credits: 1.0

8

Credits: 1.0

# World History (Freshman Required Credit)

Course Number:SS1105 Prerequisite Courses: None <u>Course Description</u>

Grade level:9 Credits:1.0

Providing students with an opportunity to learn the diverse history that has shaped our world, this course delves into the evolution of civilization from the rise of ancient empires through the 21st century. Middle school students enrolled in this exciting and informative course will investigate the development of medieval societies, the effects of the Renaissance and the Reformation, and the progress made during different periods of revolution, industrialization, urbanization, and reform. Over the course of two semesters, students will analyze effects of political conflicts and social issues on the continuing development and interdependence among nations in the modern world.

# U.S. History I (Sophomore/Junior Required Credit)

Course Number: SC3308 Prerequisite Courses: None Course Description

U.S. History I is a course that dynamically explores the people, places, and events that shaped early United States history. This course stretches from the Era of Exploration through the Industrial Revolution, leading students through a careful examination of the defining moments that paved the way for the United States of today. Students begin by exploring the colonization of the New World and examining the foundations of colonial society. As they study the early history of the United States, students will learn critical thinking skills by examining the constitutional foundations of U.S. Government. Recurring themes such as territorial expansion, the rise of industrialization, and the significance of slavery will be examined in the context of how these issues contributed to the Civil War and Reconstruction.

# U.S. Government (Junior/Senior Required Credit)

Course Number: SS3315	Grade level:11–12
Prerequisite Courses: U.S. History I	Credits: 1.0
Course Description	

This course provides students with a practical understanding of the principles and procedures of government. The course begins by establishing the origins and founding principles of American government. After a rigorous review of the Constitution and its Amendments, students investigate the development and extension of civil rights and liberties. Lessons also introduce influential Supreme Court decisions to demonstrate the impact and importance of constitutional rights. The course builds on this foundation by guiding students through the function of government today and the role of citizens in the civic process and culminates in an examination of public policy and the roles of citizens and organizations in promoting policy approaches. Throughout the course, students examine primary and secondary sources, including political cartoons, essays, and judicial opinions. Students also sharpen their writing skills in shorter tasks and assignments, and practice outlining and drafting skills by writing full informative and argumentative essays.

Grade level:10-11 Credits: 1.0

### **Economics (Junior/Senior Required)**

Course Number:SS3314 Prerequisite Courses: U.S. Government <u>Course Description</u>

This course invites students to broaden their understanding of how economic concepts apply to their everyday lives—including microeconomic and macroeconomic theory and the characteristics of mixed-market economies, the role of government in a free enterprise system and the global economy, and personal finance strategies. Throughout the course, students apply critical thinking skills while making practical economic choices. Students also master literacy skills through rigorous reading and writing activities. Students analyze data and write routinely and responsively in tasks and assignments that are based on scenarios, texts, activities, and examples. In more extensive, process-based writing lessons, students write full-length essays in informative and argumentative formats.

#### Human Geography (Elective)

Course Number: SS2045 Prerequisite Courses: None Course Description

Examining current global issues that impact our world today, this course takes a thematic approach to understanding the development of human systems, human understanding of the world, and human social organization. Divided into two semesters, this high school-level course will challenge students to develop geographic skills, including learning to interpret maps, analyze data, and compare theories. Offering interactive content that will grow students' understanding of the development of modern civilization and human systems—from the agricultural revolution to the technological revolution—this course encourages students to analyze economic trends as well as compare global markets and urban environments.

#### Survey of US History (Elective)

Course Number:SC3313 Prerequisite Courses: None Course Description

This course presents a cohesive and comprehensive overview of the history of the United States, surveying the major events and turning points of U.S. history as it moves from the Era of Exploration through modern times. As students examine each era of history, they will analyze primary sources and carefully research events to gain a clearer understanding of the factors that have shaped U.S. history. In early units, students will assess the foundations of U.S. democracy while examining crucial documents. In later units, students will examine the effects of territorial expansion, the Civil War, and the rise of industrialization as they assess the outcomes of economic trends and the connections between culture and government. As the course draws to a close, students will focus their studies on the causes of cultural and political change in the modern age. Throughout the course, students will learn the importance of cultural diversity while examining history from different perspectives.

Grade level:9–12 Credits: 1.0

Grade level: 9–12 Credits: 1.0

Grade level:9–12 Credits: 1.0

# U.S. History II (Elective)

Course Number:SC3311 Prerequisite Courses: U.S. History I <u>Course Description</u> Grade level:9–12 Credits: 1.0

U.S. History II is a year-long course that examines the major events and turning points of U.S. history from the Industrial Revolution through the modern age. The course leads students toward a clearer understanding of the patterns, processes, and people that have shaped U.S. history. As students progress through each era of modern U.S. history, they will study the impact of dynamic leadership and economic and political change on the rise of the United States to global prominence, the influence of social and political movements on societal change, and the importance of modern cultural and political developments. Recurring themes lead students to draw connections between the past and the present, between cultures, and between multiple perspectives.

# Sciences Course Descriptions

#### Life Science (Elective)

Course Number: SC1112 Prerequisite Courses: None **Course Description** 

Examining a broad spectrum of the biological sciences, this two-semester course for middle school students builds on basic principles of scientific inquiry and translates those skills to more complex overarching biological themes. The course includes units that help students understand the definition, forms, and classifications of living organisms and learn to analyze the diversity of each unique group of living organisms. Other units introduce students to the structures and functions of cells, cell theory, and cell reproduction. These larger themes are then applied to other topics, such as genetics, Darwinian Theory, and human biology and health. An introduction of ecology draws all of these concepts together to examine the interrelationships that help to maintain life on Earth.

#### **Earth Science**

**Course Number: SC1113** Prerequisite Courses: None **Course Description** 

Students enrolled in this dynamic course will explore the scope of Earth sciences, covering everything from basic structure and rock formation to the incredible and volatile forces that have shaped and changed our planet. As climate change and energy conservation become increasingly more prevalent in the national discourse, it will be important for students to understand the concepts and causes of our changing Earth. Earth Science is a two-semester course that will provide a solid foundation for understanding the physical characteristics that make the planet Earth unique and will examine how these characteristics differ among the planets of our solar system.

# **Physical Science**

Course Number: SC1114 Prerequisite Courses: None **Course Description** 

Encompassing the branch of science that studies nonliving systems, this course inspires students to explore key concepts and theories, each of which explains and/or models a particular aspect of the behavior of nature. Students enrolled in this two-semester course examine the chemical building blocks of our physical world and the composition of matter. Additionally, students explore the properties that affect motion, forces, and energy on Earth. Building on these concepts, the course covers the dynamic properties of electricity and magnetism and the effects these phenomena exhibit on the planet. A cumulative study of how each of these concepts elicits reactions across the solar system rounds out this dynamic course.

# **Environmental Science (Required Freshman Class)**

Course Number: SC2028	Grade level: 9
Prerequisite Courses: None	Credits: 1.0

**Course Description** 

Environmental science is a captivating and rapidly expanding field, and this two-semester course offers compelling lessons that cover many different aspects of the field: ecology, the biosphere, land, forests and soil, water, energy and resources, and societies and policy. Through unique activities and material, high school students connect scientific theory and concepts to current, real-world dilemmas, providing them with opportunities for mastery in each of the segments throughout the semester.

Grade level: 6 Credits: 1.0

Grade level: 7 Credits: 1.0

Grade level:8 Credits: 1.0

### **Biology (Sophomore Science Required for Regent Schools)**

Course Number: SC3209 Prerequisite Courses: None <u>Course Description</u>

This compelling two-semester course engages students in the study of life and living organisms and examines biology and biochemistry in the real world. This is a year-long course that encompasses traditional concepts in biology and encourages exploration of new discoveries in this field of science. The components include biochemistry, cell biology, cell processes, heredity and reproduction, the evolution of life, taxonomy, human body systems, and ecology.

#### **Chemistry (Junior Science Required for Regent Schools)**

Course Number: SC3210 Prerequisite Courses: None

Course Description

This rigorous full-year course engages students in the study of the composition, properties, changes, and interactions of matter. The course covers the basic concepts of chemistry and includes18 virtual laboratory experiments that encourage higher-order thinking applications. The components of this course include chemistry and its methods, the composition and properties of matter, changes and interactions of matter, factors affecting the interactions of matter, electrochemistry, organic chemistry, biochemistry, nuclear chemistry, mathematical applications, and applications of chemistry in the real world.

#### **Physics (Elective)**

Course Number: SC3211 Prerequisite Courses: Algebra I Course Description Grade level: 11–12 Credits: 1.0

This full-year course focuses on traditional concepts in physics, and encourages exploration of new discoveries in this field of science. The course includes an overview of scientific principles and procedures, and leads students toward a clearer understanding of motion, energy, electricity, magnetism, and the laws that govern the physical universe. As students refine and expand their understanding of physics, they will apply their knowledge in experiments that require them to ask questions and create hypotheses. Throughout the course, students solve problems, reason abstractly, and learn to think critically.

Grade level: 10 Credits: 1.0

Grade level: 11 Credits: 1.0

# Math Course Descriptions

#### Mathematics 6

Course Number:MA3106 **Prerequisite Courses: Mathematics 5 Course Description** 

This course begins by connecting ratio and rate to multiplication and division, allowing students to use ratio reasoning to solve a wide variety of problems. They further apply their understanding of multiplication and division to explain the standard procedure for dividing fractions. This course builds upon previous notions of the number system to now include the entire set of rational numbers. Students begin to understand the use of variables as they write, evaluate, and simplify expressions. They use the idea of equality and properties of operations to solve one-step equations and inequalities. In statistics, students explore different graphical ways to display data. They use data displays, measures of center, and measures of variability to summarize datasets. The course concludes with students reasoning about relationships among shapes to determine area, surface area, and volume.

#### **Mathematics 7**

Course Number:MA3107 **Prerequisite Courses: Mathematics 6 Course Description** 

This course begins with an in-depth study of proportional reasoning where students utilize concrete models such as bar diagrams and tables to increase and develop conceptual understanding of rates, ratios, proportions, and percentages. Students' number fluency and understanding of the rational number system are extended as they perform operations with signed rational numbers embedded in real-world contexts. In statistics, students develop meanings for representative samples, measures of central tendency, variation, and the ideal representation for comparisons of given data sets. Students develop an understanding of both theoretical and experimental probability. Throughout the course students build fluency in writing expressions and equations that model real-world scenarios. They apply their understanding of inverse operations to solve multi-step equations and inequalities. Students build on their proportional reasoning to solve problems about scale drawings by relating the corresponding lengths between objects. The course concludes with a geometric analysis of angle relationships, area, and volume of both two and three-dimensional figures.

#### **Pre-Algebra**

Course Number: MA3119 **Prerequisite Courses: Mathematics 8 Course Description** 

This full-year course is designed for students who have completed a middle school mathematics sequence but are not yet Algebra-ready. This course reviews key algebra readiness skills from the middle grades and introduces basic Algebra I work with appropriate support. Students revisit concepts in number and operations, expressions and equations, ratio and proportion, and basic functions. By the end of the course, students are ready to begin a more formal high school Algebra I study.

Grade Level:6 Credits:1.0

Grade Level: 7 Credits: 1.0

Grade Level:9 Credits: 1.0

#### Algebra I

Course Number: MA3109 Prerequisite Courses: Pre-Algebra <u>Course Description</u>

This full-year course focuses on five critical areas: relationships between quantities and reasoning with equations, linear and exponential relationships, descriptive statistics, expressions and equations, and quadratic functions and modeling. This course builds on the foundation set in middle grades by deepening students' understanding of linear and exponential functions, and developing fluency in writing and solving one-variable equations and inequalities. Students will interpret, analyze, compare, and contrast functions that are represented numerically, tabularly, graphically, and algebraically. Quantitative reasoning is a common thread throughout the course as students learn how they can use algebra to represent quantities and the relationships among those quantities in a variety of ways. Standards of mathematical practice and process are embedded throughout the course, as students make sense of problem situations, solve novel problems, reason abstractly, and think critically.

#### **General Mathematics I**

Course Number: MA2005	Grade level: 9
Prerequisite Courses: Pre-Algebra or Math 8	Credits:1.0
<u>Course Description</u>	

This course formalizes and extends middle-school mathematics, deepening their understanding of linear relationships. The course begins with a review of relationships between quantities, building from unit conversion to a study of expressions, equations, and inequalities. Students contrast linear and exponential relationships, including a study of sequences, as well as applications such as growth and decay. Students review one-, two-, and multi-step equations, formally reasoning about each step using properties of equality. Students extend this reasoning to systems of linear equations. Students use descriptive statistics to analyze data before turning their attention to transformations and the relationship between Algebra and Geometry on the coordinate plane

#### Geometry

Course Number: MA2005 Prerequisite Courses: Algebra I Course Description

Offering a hands-on approach to instruction, this is an interactive course designed to introduce the basics of geometry through engaging lectures and informative lesson plans. Students will be challenged to apply previously learned knowledge to higher-level ideas such as reasoning and proof, Geometric Relationships, and Logic. This informative two-semester course covers fundamentals of shapes, surface area and volume of shapes, transformations, as well as learning strategies that include writing, analyzing, and using proofs. High-school students will gain valuable, tangential knowledge of more complex concepts, such as Trigonometry.

Grade level: 9 Credits: 1.0

Grade level: 10

Credits: 1.0

# **General Mathematics II**

Course Number: MA2006 Prerequisite Courses: General Math I <u>Course Description</u>

This course begins with a brief exploration of radicals and polynomials before delving into quadratic expressions, equations, and functions, including a derivation of the quadratic formula. Students then embark on a deep study of the applications of probability and develop advanced reasoning skills with a study of similarity, congruence, and proofs of mathematical theorems. Students explore right triangles with an introduction to right triangle trigonometry before turning their attention into the geometry of circles and making informal arguments to derive formulas for the volumes of various solids.

#### Algebra II

Course Number:MA3111 Prerequisite Courses: Algebra I, Geometry <u>Course Description</u>

This course focuses on the four critical areas Algebra II: functions, polynomials, periodic phenomena, and collecting and analyzing data. The course begins with a review of linear and quadratic functions, to solidify a foundation for learning these new functions. Students will make connections between verbal, numeric, algebraic, and graphical representations of functions and apply this knowledge as they create equations and inequalities that can be used to model and solve mathematical and real-world problems. As students refine and expand their algebraic skills, they will draw analogies between the operations and field properties of real numbers and those of complex numbers and algebraic expressions.

#### **Personal Finance**

Course Number: EL3403 Prerequisite Courses: None Course Description

This one-semester elective prepares students to navigate personal finance with confidence. The course opens with a study of what it means to be financially responsible, engaging students in budgeting, planning, and being a smart consumer. Students learn about the relationship between education, employment, income, and net worth, and they plan for the cost of college. Students then broaden their study to include banking, spending, investing, and other money management concepts before exploring credit and debt. In the final unit of the course, students study microeconomics and entrepreneurship, with an overview of economic systems, supply and demand, consumer behavior and incentives, and profit principles. The course concludes with an in-depth case study about starting a business.

#### **Financial Math**

Course Number: MA2007 Prerequisite Courses: None Course Description

Connecting practical mathematical concepts to personal and business settings, MA2007 offers informative and highly useful lessons that challenge students to gain a deeper understanding of financial math. Relevant, project-based learning activities cover stimulating topics such as personal financial planning, budgeting and wise spending, banking, paying taxes, the importance of insurance, long-term investing, buying a house, consumer loans, economic principles, traveling abroad, starting a business, and analyzing business data. Offered as a two-semester course for high school students, this course encourages mastery of math skill sets, including

Grade level: 10 Credits:1.0

Grade level: 11 Credits: 1.0

Grade level: 9–12 Credits: 0.5

Grade level:9–12 Credits: 1.0

# **Mathematical Models with Applications**

Course Number: MA4072 Prerequisite Courses: Algebra I <u>Course Description</u>

Broadening and extending the mathematical knowledge and skills acquired in Algebra I, the primary purpose of MA4072 is to use mathematics as a tool to model real-world phenomena students may encounter daily, such as finance and exponential models. Engaging lessons cover financial topics, including growth, smart money, saving, and installment loan models. Providing timely and highly useful content, this two-semester course is a must-have for any high school student. Prior mathematical knowledge is expanded and new knowledge and techniques are developed through real-world application of useful mathematical concepts.

#### **Pre Calculus**

Course Number: MA1104 Prerequisite Courses: Algebra II <u>Course Description</u>

With an emphasis on function families and their representations, Pre Calculus is a thoughtful introduction to advanced studies leading to calculus. The course briefly reviews linear equations, inequalities, and systems and moves purposefully into the study of functions. Students then discover the nature of graphs and deepen their understanding of polynomial, rational, exponential, and logarithmic functions. Scaffolding rigorous content with clear instruction, the course leads students through an advanced study of trigonometric functions, matrices, and vectors. The course concludes with a short study of probability and statistics.

#### Trigonometry

Course Number: MA1403 Prerequisite Courses: Algebra II Course Description

In this one-semester course, students use their geometry and algebra skills to begin their study of trigonometry. Students will be required to express understanding using qualitative, quantitative, algebraic, and graphing skills. This course begins with a quick overview of right triangle relationships before introducing trigonometric functions and their applications. Students explore angles and radian measures, circular trigonometry and the unit circle. Students extend their understanding to trigonometric graphs, including the effects of translations and the inverses of trigonometric functions. This leads to the Laws of Sines and Cosines, followed by an in-depth exploration of trigonometric identities and applications. The course ends with an introduction to the polar coordinate system, complex numbers, and DeMoivre's Theorem.

Grade level:10–12 Credits: 1.0

Grade level: 12 Credits: 1.0

Grade level: 12 Credits: 1.0

# PE and Health Course Descriptions

#### Foundations or Personal Wellness (Required Freshman Credit)

Course Number:EL2082 Prerequisite Courses: None <u>Course Description</u>

Exploring a combination of health and fitness concepts, this comprehensive and cohesive course explores all aspects of wellness. Offered as two-semester course designed for high school students, coursework uses pedagogical planning to ensure that students explore fitness and physical health and encourages students to learn about the nature of social interactions and how to plan a healthy lifestyle

# Healthy Living (Freshman Elective Credit)

Course Number: EL2081 Prerequisite Courses: None <u>Course Description</u>

Encouraging students to make responsible, respectful, informed, and capable decisions about topics that affect the well-being of themselves and others, this course is a one semester course that provides students with comprehensive information they can use to develop healthy attitudes and behavior patterns. Designed for high school students, this informative and engaging course encourages students to recognize that they have the power to choose healthy behaviors to reduce risks.

# Lifetime Fitness (Required Freshman Credit)

Course Number: EL2083 Prerequisite Courses: None

<u>Course Description</u>

Exploring fitness topics such as safe exercise and injury prevention, nutrition and weight management, consumer product evaluation, and stress management, this course equips high school students with the skills they need to achieve lifetime fitness. Throughout this one-semester course, students assess individual fitness levels according to the five components of physical fitness: cardiovascular health, muscular strength, muscular endurance, flexibility, and body composition. Personal fitness assessments encourage students to design a fitness program to meet their individual fitness goals.

Grade level: 9–12 Credits: 0.5

Grade level: 9–12 Credits: 0.5

Grade level:9–12 Credits: 1.0

# **Elective Course Descriptions**

### **Strategies for Academic Success**

Course Number:EL1187 Prerequisite Courses:None <u>Course Description</u> Grade level: 9–12 Credits: 0.5

Offering a comprehensive analysis of different types of motivation, study habits, and learning styles, this one-semester course encourages high school and middle school students to take control of their learning by exploring varying strategies for success. Providing engaging lessons that will help students

identify what works best for them individually, this one-semester course covers important study skills, such as strategies for taking high-quality notes, memorization techniques, testtaking strategies, benefits of visual aids, and reading techniques

# Online Learning and Digital Citizenship (Still working on getting this class)

Course Number: EL3402 Prerequisite Courses: None Course Description

In this one-semester course, students develop essential study skills for academic success, such as staying organized, managing time, taking notes, applying reading strategies, writing strong papers, and researching and properly citing information. Explicit modeling and ample practice are provided for each study skill to support student mastery. Instruction on how to be a responsible online learner is threaded throughout the course, and these skills are directly addressed in lessons on cyber-bullying, staying safe online, and learning how to be a digital leader. A basic understanding of software and hardware and how to troubleshoot common technology issues are also taught. By the end of the course, students will have the tools they need to be academically successful in both traditional and digital learning environments.

# **Career Explorations**

Course Number: CE3401 Prerequisite Courses: None Course Description

This course prepares middle-school students to make informed decisions about their future academic and occupational goals. Through direct instruction, interactive skills demonstrations, and practice assignments, students learn how to assess their own skills and interests, explore industry clusters and pathways, and develop plans for career and academic development. This course is designed to provide flexibility for students; any number of units can be selected to comprise a course that meets the specific needs of students to plan and launch a product or service in today's fast-paced business environment.

Grade level: 6–12

Grade level: 6– Credits: 1

Grade level: 9–12 Credits: 0.5

#### **Career Planning and Development**

Course Number: EL4222 Prerequisite Courses: None **Course Description** 

Introducing high school students to the working world, this course provides the knowledge and insight necessary to compete in today's challenging job market. This relevant and timely course helps students investigate careers as they apply to personal interests and abilities, develop skills and job search documents needed to enter the workforce, explore the rights of workers and traits of effective employees, and address the importance of professionalism and responsibility as careers change and evolve. This one-semester course includes lessons in which students create a self-assessment profile, a cover letter, and a résumé that can be used in their educational or career portfolio.

#### **Introduction to Art**

Course Number: EL1086 Prerequisite Courses: None **Course Description** 

Grade level: 9-12 Credits: 0.5

Covering art appreciation and the beginning of art history, this course encourages students to gain an understanding and appreciation of art in their everyday lives. Presented in an engaging format, this one-semester course provides an overview of many introductory themes: the definition of art, the cultural purpose of art, visual elements of art, terminology and principles of design, and two-and three-dimensional media and techniques. Tracing the history of art, high school students enrolled in the course also explore the following time periods and places: prehistoric art, art in ancient civilizations, and world art before 1400.

#### Art History I

Course Number: EL4002 Prerequisite Courses: None **Course Description** 

Introducing art within historical, social, geographical, political, and religious contexts for understanding art and architecture through the ages, this course offers high school students an in-depth overview of art throughout history, with lessons organized by chronological and historical order and world regions. Students enrolled in this onesemester course will cover topics including early Medieval and Romanesque art; art in the 12th, 13th, and 14th centuries; 15th-century art in Europe; 16th-century art in Italy; the master artists; high Renaissance and Baroque art; world art, which includes the art of Asia, Africa, the Americas, and the Pacific cultures; 18th-and 19th-century art in Europe and the Americas; and modern art in Europe and the Americas.

# **Digital Arts**

Course Number: EL5719 & EL5720 Prerequisite Courses: None **Course Description** 

The Digital Arts course focuses on building a solid foundation of the basic elements of visual art, then moves on to more advanced principles and elements of art and design. This course teaches core skills using Inkscape<sup>™</sup>, a free open-source alternative to Adobe® Illustrator®. Topics include learning processes for evaluating artwork, and identifying selected artists' works, styles, and historical periods. Students learn 3DD space in a 2D environment; filters, gradients and highlights; and methods of working with color. They express themselves creatively in original digital drawings and artwork. By the end of this course, students will have created a unique portfolio of digital artwork, including repeating images to be used as a desktop background, a logo with text, two images scaled proportionally to one another, and a poster image and layout.

Grade level: 9–12 Credits: 0.5

Grade level: 9–12 Credits: 1

Grade level:9-12 Credits: 0.5

### **3D Art I- Modeling**

Course Number: EL5717 Prerequisite Courses: None <u>Course Description</u>

The 3D Art I – Modeling design course focuses on the fundamental concepts of 3D modeling and explores the basic concepts and skills of 3D animation. Students learn Blender® software to create 3D models such as a house, a creature, an animation of the creature walking, and a landscape terrain. Activities include using points on a grid to create mountains and a color gradient to create a sun and a moon. Students learn 3D space and 3D objects; creating, scaling, and rotating objects; materials and textures; poses and key frames; extruding and mirroring 3D objects; rendering animations; and appending materials, textures, objects, armatures, and animations.

#### **3D Art I- Animation**

Course Number: EL5718 Prerequisite Courses: None <u>Course Description</u>

The 3D Art II Animation design course focuses on building animation skills including realistic movement and lighting. Students learn the Blender® software workspace and tools; location and rotation properties; scripts; IP curves; vector handles; rendering and baking animations and simulations; and particle systems and emitters. Activities and projects promote key 3D animation concepts including frames and key frames, squash and stretch, action strips, walk cycles and poses, and trajectories. Students develop the skills needed to design and create animations with an understanding of the skills needed to succeed as professional animators. (Prerequisite: 3D Art I: Modeling).

#### **Image Design and Editing**

Course Number: EL5726 Prerequisite Courses: None Course Description

The Image Design and Editing course teaches the foundational skills of composition, color, and layout through a series of creative projects. Using the GIMP software program, students create a graphic design portfolio of professional-quality images and advertisements that combine images, color shading, text, and shapes. Activities include working with layers and masks, adding special effects, and using typefaces to create visual impact. By the end of the course, students will have the skills to create and edit images of their own design.

Grade level: 6–12 Credits: 1

Grade level: 6–12 Credits: 1

Grade level: 6–12 Credits: 1

# **Projects in Audio Engineering**

Course Number: EL5716 Prerequisite Courses: None <u>Course Description</u>

This course introduces students to audio engineering. Students learn about the physics of sound, as well as techniques for protecting hearing while working with audio. Students will learn about the history of recording technologies, as well as techniques for evaluating audio hardware, such as microphones and speakers. Students will also learn about the four stages of professional music recording projects: recording, editing, mixing, and mastering. Using Audacity, an open-source recording and mixing program, students will practice the techniques used by sound engineers to produce multitrack recordings. Students learn about the difference between proprietary, opensource, and free software licenses, as well as the most popular Digital Audio Workspace software used in the profession. Students will also learn about intellectual property issues involving audio, particularly when using other people's music. Through a series of engaging hands-on projects, students will learn the fundamental concepts of audio engineering. A series of interviews with professional audio engineers will give students a sense of the opportunities and requirements for pursuing careers in the field.

# **Projects in Game Design**

Course Number: EL5716 Prerequisite Courses: None <u>Course Description</u>

Utilizing the Multimedia Fusion 2® software program, this one-semester course allows students to build a solid foundation in the fundamentals of game design and development. Students create an impressive portfolio of interactive, engaging games such as a classic two-player ping pong game, a Block-breaking action game, and a maze game with moving obstacles. Students learn the MMF2 language of events, conditions, and actions; game objects that track scores, lives, time; and more, automated, random, and user-controlled movement. Topics include libraries and game sounds and game design concepts including objects, layers and frames, cursors and crosshairs, pixels and coordinates, calculations, title and end screens, and looping animations.

Grade level: 6–12 Credits: .5

Grade level: 6–12 Credits: .5

#### **Engineering Design**

Course Number: EL5728 Prerequisite Courses: None <u>Course Description</u> Grade level: 9-12 Credits: 1.0

Designers and manufactures in virtually every industry use computer-aided design systems to create engineering design solutions. In this two-semester course, students will master the basics of CAD software: creating points, lines, other geometric forms, isometric drawings and 3D walkthroughs. Students will explore career options for engineers and CAD designers in this hands-on introductory level course. This course includes instruction on how to create standardized drawings using basic CAD tools, interpreting 3D and 2D views of objects; producing orthographic, auxiliary, and section drawings; and creating a set of working drawings met to be viewed by clients. In the second semester of this class, students will continue to develop the engineering and computer-aided design skills gained in Engineering Design I. Students will continue to explore the principles of 2D and 3D modeling and design using Creo Elements/Direct Modeling Personal Edition and build on the math and reasoning skills essential to engineering. The hands-on experience students will gain through completing design challenges, product analyses, and more will equipt hem with the tools engineers need to succeed. This course includes instruction on how to manipulate both 2D and 3D objects in a 3D environment, on overview of the design process, how to perform in-depth product analysis, the mathematical skills used in 2D and 3D geometry, and how to dimension objects.

#### **Computer Science I and II**

Course Number: EL5722& EL5723 Prerequisite Courses: None <u>Course Description</u>

Computer Science I introduces students to the basics of computer science through a series of Python® programming projects that encourage creativity and experimentation. Students create a diverse portfolio of projects as they learn commands and functions, values and variables, Graphical User Interface, modular and object-oriented programming, and events and event-driven processes. Students learn loops, debugging techniques and software development processes including iterative and incremental models. Students explore careers in programming, including profiles from a wide variety of programming professionals.

The Computer Science II course advances the student's knowledge of Python software and programming skills through a series of complex programming projects that require creative thinking and problem solving. Students learn arrays and sets, generators and namespaces, loops, packages and libraries, randomness, and file handling. Students also learn to program simple games. Students explore careers in programming, including profiles from a wide variety of programming professionals.

Grade level: 9-12 Credits: 1.0

# Introduction to Entrepreneurship I & II

Course Number: EL5724& EL5725 **Prerequisite Courses: None Course Description** 

The Introduction to Entrepreneurship I course teaches the basics of planning and launching a business. Whether interested in creating a money-making business or a nonprofit to help others, this course provides the core skills needed to succeed. Students learn about real-life teen entrepreneurs, characteristics of successful entrepreneurs, pros and cons of self-employment, and how to attract investors and manage expenses. Students learn how to generate business ideas; create a business plan, mission and vision; and promote and market a company. Topics include exploring factors of business success and failure, core business concepts, economic systems, competition, production, and the global economy.

The Introduction to Entrepreneurship II course advances the skills and key business concepts students need to know to plan and launch a business. Students learn about setting personal visions and goals, sales stages, opportunities and strategies, planning and budgeting, and interpersonal communication in the workplace. Topics include financing a business; costs and pricing, accounting; bookkeeping, and financial reporting; the role of the government in business; regulations, and laws; working with others; and successfully managing employees.

#### **Psychology**

Course Number: EL2084 **Prerequisite Courses: None Course Description** 

This two-semester course introduces high school students to the study of psychology and helps them master fundamental concepts in research, theory, and human behavior. Students analyze human growth, learning, personality, and behavior from the perspective of major theories within psychology, including the biological, psychosocial, and cognitive perspectives. From a psychological point of view, students investigate the nature of being human as they build a comprehensive understanding of traditional psychological concepts and contemporary perspectives in the field. Course components include an introduction to the history, perspectives, and research of psychology; an understanding of topics such as the biological aspects of psychology, learning, and cognitive development; the stages of human development; aspects of personality and intelligence; the classification and treatment of psychological disorders; and psychological aspects of social interactions.

#### Sociology

Course Number: EL1120 Prerequisite Courses: None **Course Description** 

Providing insight into the human dynamics of our diverse society, this is an engaging course that delves into the fundamental concepts of sociology. This interactive course, designed for high school students, covers cultural diversity and conformity, basic structures of society, individuals and socialization, stages of human development as they relate to sociology, deviance from social norms, social stratification, racial and ethnic interactions, gender roles, family structure, the economic and political aspects of sociology, the sociology of public institutions, and collective human behavior, both historically and in modern times.

Grade level: 9-12 Credits: 1.0

Grade level:11-12

Grade level: 11–12 Credits:1

Credits: 1.0

### Spanish I & II

Course Number: EL959 Prerequisite Courses: None Course Description Grade level: 9–12 Credits:1

Introducing high school students to the Spanish language through individualized lesson plans, EL959 offers an engaging overview of core grammatical structures and the vocabulary necessary for elementary communication. Over the course of two semesters, students are also introduced to the traditions and customs of Spanish-speaking people across the world.

Designed for students who have successfully completed Spanish I, EL960 offers high school students interactive lesson plans that encourage open communication to enable students to utilize the Spanish they have acquired. High-frequency, thematic, and contextualized vocabulary lessons aid in fluency and retention, and practice helps students achieve mastery of the concepts. Real-life conversation activities are presented throughout this two-semester course, alongside cultural readings in both text and audio format so that students are exposed to the Hispanic culture from around the world.

# CTE (Career & Technical Education)Elective Course Descriptions

# Health Science Concepts (Anatomy & Physiology Basics)

Course Number: EL3602 Prerequisite Courses: Biology Course Description

This yearlong course introduces high school students to the fundamental concepts of anatomy and physiology—including the organization of the body, cellular functions, and the chemistry of life. As they progress through each unit, students will learn about the major body systems, common diseases and disorders, and the career specialties associated with each system. Students will investigate basic medical terminology as well as human reproduction and development. Students are introduced to these fundamental health science concepts through direct instruction, interactive tasks, and practice assignments. This course is intended to provide students with a strong base of core knowledge and skills that can be used in a variety of health science career pathways.

# **Introduction to Business**

Course Number: EL3501 Prerequisite Courses: None <u>Course Description</u>

In this two-semester introductory course, students will learn the principles of business using real-world examples—learning what it takes to plan and launch a product or service in today's fast-paced business environment. This course covers an introduction to economics, costs and profit, and different business types. Students are introduced to techniques for managing money, personally and as a business, and taxes and credit; the basics of financing a business; how a business relates to society both locally and globally; how to identify a business opportunity; and techniques for planning, executing, and marketing a business to respond to that opportunity.

# **Introduction to Health Science**

Course Number: EL3601 Prerequisite Courses: None <u>Course Description</u>

This high school course introduces students to a variety of healthcare careers as they develop the basic skills required in all health and medical sciences. In addition to learning the key elements of the U.S. healthcare system, students will learn terminology, anatomy and physiology, pathologies, diagnostic and clinical procedures, therapeutic interventions, and the fundamentals of medical emergency care. Throughout the course, instructional activities emphasize safety, professionalism, accountability, and efficiency for workers within the healthcare field.

Grade Level :10–12 Credits: 1.0

Grade level: 10-12 Credits: 1.0

Grade level: 9–12 Credits:1.0

# Introduction to Information Technology

Course Overview and Syllabus Course Number: EL3701 Prerequisite Courses: None <u>Course Description</u>

This course introduces students to the essential technical and professional skills required in the field of Information Technology (IT). Through hands-on projects and written assignments, students gain an understanding of the operation of computers, computer networks, Internet fundamentals, programming, and computer support. Students also learn about the social impact of technological change and the ethical issues related to technology. Throughout the course, instructional activities emphasize safety, professionalism, accountability, and efficiency for workers within the field of IT.

#### **Medical Terminology**

Course Number: EL3620 Prerequisite Courses: Nursing Assistant <u>Course Description</u>

This semester-long course introduces students to the structure of medical terms, including prefixes, suffixes, word roots, combining forms, and singular and plural forms, plus medical abbreviations and acronyms. The course allows students to achieve comprehension of medical vocabulary appropriate to healthcare settings, medical procedures, pharmacology, human anatomy and physiology, and pathology. The knowledge and skills gained in this course will provide students entering the healthcare field with a deeper understanding of the application of the language of health and medicine. Students are introduced to these skills through direct instruction, interactive tasks, and practice assignments.

#### Nursing Assistant

Course Number: EL3610 Prerequisite Courses: Health Science Concepts <u>Course Description</u>

This two-semester course prepares students to provide and assist with all aspects of activities of daily living and nursing care for the adult patient in hospital, long-term care, and home settings. Through direct instruction, interactive skills demonstrations, and practice assignments, students are taught the basics of nurse assisting, including interpersonal skills, medical terminology, care procedures, legal and ethical responsibilities, safe and efficient work, gerontology, nutrition, emergency skills, and employability skills. Successful completion of this course from an approved program prepares the student for state certification for employment as a Nursing Assistant.

# **Pharmacy Technician**

Course Number: EL3630 Prerequisite Courses: Health Science Concepts <u>Course Description</u>

This two-semester course prepares students for employment in the pharmacy technician field. Through direct instruction, interactive skills demonstrations, and practice assignments, students learn the basics of pharmacy assisting, including various pharmacy calculations and measurements, pharmacy law, pharmacology, medical terminology and abbreviations, medicinal drugs, sterile techniques, USP 795 and 797 standards, maintenance of inventory, patient record systems, data processing automation in the pharmacy, and employability skills. Successful completion of this course prepares the student for national certification for employment as a Certified Pharmacy Technician (CPhT).

Grade level: 9–12 Credits:1.0

Grade level: 9–12 Credits: .5

Grade level: 10–12 Credits: 1.0

Grade level: 10–12 Credits: 5