

# **SUGAR VALLEY**

## **RURAL CHARTER SCHOOL**



**2022-2023**  
**Course Description Manual**

This handbook includes general information and course descriptions that outline the curriculum offerings at Sugar Valley Rural Charter School. Use it as a guide, along with the help and advice of your counselors, teachers, and family, to plan an appropriate program of studies for the coming year.

## Graduation Requirements

Students must compile a minimum of twenty-five (26) credits in order to graduate from SVRCS. These credits are acquired in Grades 9 through 12.

Courses required by the Sugar Valley Rural Charter School are as follows:

Content Area	Number of Credits Required
English Language Arts	4
Mathematics	4
Science	4
Social Studies	4
Art/Music	4 (At least 1 full credit from each of Art and Music)
Health and Physical Education	2 (Beginning with the class of 2022, Health 11 is a required course)
Elective Courses	4
<b>TOTAL CREDITS</b>	<b>26</b>

All students must complete a Graduation Portfolio Project.

Additionally, students must meet all current requirements put in place by the Pennsylvania Department of Education for their graduating class.

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# Grading Scale

Letter grades are assigned based upon the scale below. A 70% is the minimum passing score.

A = 93-100

B = 86-92

C = 78-85

D = 70-77

F = 0-69

## Graduation Portfolio Project

All students must complete a Graduation Portfolio Project to receive their diploma. Full details on this project will be covered in the Career Readiness that all 11<sup>th</sup> students are required to take.

## Commonwealth Requirements

[Act 158 of 2018](#) (Act 158), signed into law by Governor Tom Wolf on October 24, 2018, provides alternatives to Pennsylvania's statewide requirement of attaining proficiency on the three end-of-course Keystone Exams (Algebra I, Literature, and Biology) for a student to achieve statewide graduation requirements.

Effective with the graduating class of 2023, students have the option to demonstrate postsecondary preparedness through one of four additional pathways that more fully illustrate college, career, and community readiness. Keystone Exams will continue as the statewide assessment Pennsylvania uses to comply with accountability requirements set forth in the federal Every Student Succeeds Act (ESSA). Although students will no longer be required to achieve proficiency on the Keystone Exams to meet the statewide graduation requirement, **students must take the Keystone Exams for purposes of federal accountability**. Failure to do so will affect a Local Education Agency (LEA) and school's participation rate.

# Recommended Course Sequences

Grade Level	History/ Social Studies (4 Cr Required)	Mathematics (4 Cr Required)	English/ Language Arts (4 Cr Required)	Science (4 Cr Required)
Ninth Grade	US Hist II/Civics	Algebra 1/Geometry	English 9	Biology
Tenth Grade	US Hist II/Civics	Geometry/ Algebra 2	English 10/College Prep & Comp	Keystones Biology or Choice
Eleventh Grade	World History II	Algebra 2/ Trigonometry	English 11/ College Prep & Comp	Choice
Twelfth Grade	US History III Economics Psychology	Math 12 / Trigonometry/ Calculus	English 12 / College Prep & Comp / AP English	Choice

## Course Prerequisites

The table below shows the requirements that must be met before taking any classes above marked with a (\*). For further details, consult the Course Selection handbook or speak with the course instructor.

Course Name	Prerequisite	Course Name	Prerequisite	Course Name	Prerequisite
English 10	English 9	Advanced Biology	Biology Passed Keystone Bio	Vet Science	Biology
English 11	English 10	Chemistry	Biology Passed Alg Keystone		
English 12	English 11 Or Honors English	Physics	Biology Alg 2	AP Studio Art	11 <sup>th</sup> /12 <sup>th</sup> Grade Teacher permission 2 other art classes
Honors English	10 <sup>th</sup> /11 grade Passed Keystone Ex Teacher Permission	Genetics	Biology		
AP English	12th grade Honors English Teacher Permission	Forensics	Biology	Sales & Marketing	Intro to Business
		AP Enviro	10 <sup>th</sup> /11 <sup>th</sup> Grade Biology Environmental Sci	Video Game Design	Computing Ideas or Programming JavaScript
Algebra II	Algebra I or Algebra 8				
Trigonometry	Geometry	AP US Hist	11 <sup>th</sup> /12 <sup>th</sup> Grade Teacher Permission World History II	Mobile Apps	Computing Ideas & Programming JavaScript
Calculus	Trigonometry	AP US Govt	11 <sup>th</sup> /12 <sup>th</sup> Grade Teacher Permission World History II	Fundamentals of Cybersecurity	Computing Ideas
		Psychology	11 <sup>th</sup> /12 <sup>th</sup> Grade World History II	Data Structures in C++	Computing Ideas & Programming JavaScript or Python
		Economics	11 <sup>th</sup> /12 <sup>th</sup> Grade World History II		

# Course Descriptions

## ENGLISH/LANGUAGE ARTS

### **ENGLISH 9 (Full year course – 1 credit)**

This course is a survey of all types of Literature and includes a variety of literary genres. It is designed to incorporate a mixture of grammar exploration, writing, academic vocabulary, informational text vocabulary, and a Shakespeare unit. There is a strong emphasis on grammatical structure and writing throughout different genres.

All students are required to take a ninth grade English course

### **ENGLISH 10 (Full year course – 1 credit)**

This course is a survey of all types of literature and includes a variety of literary genres from American Literature. It is designed to incorporate a mixture of literature, writing, recognizing literary devices, and interpreting meaning. There is a strong emphasis on reading, writing, and discussion.

Prerequisite: Successful completion of English 9 course. All students are required to take a tenth grade English course.

### **ENGLISH 11 (Full year course – 1 credit)**

This course will aid in developing and expressing ideas effectively for a variety of personal and professional purposes, audiences, and occasions. In this course students will learn how to craft their writing to meet the needs of specific audiences for specific purposes; how to make decisions about what to include and not include in their writing; how to use invention, research, drafting, revising, and editing in writing; how to use various formats and choices in style, including genre conventions; and how to benefit from curiosity, openness, engagement, creativity, persistence, responsibility, flexibility, and reflection.

Prerequisite: Successful completion of English 10 course. All students are required to take an eleventh grade English course.

### **AP ENGLISH (Full year course – 1 credit)**

This course is designed to engage students in close reading and critical analysis of literature. This course will build upon previous knowledge and literary experience while increasing their exposure to, and understanding of, various works of literature. This course will expose students to various texts drawn from multiple genres, periods, and cultures. The students will develop their close reading skills at three levels: experience, interpretation, and evaluation. The purpose of this AP English course is to teach three major skills that are interrelated: close-textual analysis, critical analysis and high quality writing.

PREREQUISITES: This course is reserved for those who have passed the Keystone Exams; successfully completed two years of Honors English, or who have successfully completed one year of Honors English and have been granted permission by administration and the course instructor.

### **ENGLISH 12 (Full year course – 1 credit)**

This course examines Communication in the 21st Century. It is a project and presentation-based class that will prepare students for life after high school. It will focus on skills in public speaking and presenting, research, and creating presentations using technology. There is a strong emphasis on writing, speaking, and discussion.

Prerequisite: Successful completion of English 11 or Honors course. All students are required to take a twelfth grade English course.

### **HONORS – AP PREPARATION & COMPOSITION (Full year course – 1 credit) - 2 year cycle with Honors – College Prep & Composition (below)**

This course is designed to prepare students who plan on taking AP Literature and Composition course and the AP exam in grade 12. It is designed to incorporate a mixture of literary genres, writing, recognizing literary devices and interpreting meaning. There is a strong emphasis on reading, writing, and discussion.

Prerequisite: Only open to 10th and 11th grade students that scored Proficient or better on the Keystone Literature exam. This course would be in place of an English 10 or English 11 that is required.

### **HONORS – COLLEGE PREPARATION & COMPOSITION (Full year course – 1 credit) - 2 year cycle with Honors – AP Prep & Composition (above)**

This course is designed to prepare students who plan on taking AP Literature and Composition course and the AP exam in grade 12. It is designed to incorporate a mixture of literary genres, writing, recognizing literary devices and interpreting meaning. There is a strong emphasis on reading, writing, and discussion.

Prerequisite: Only open to 10th and 11th grade students who scored Proficient or better on the Keystone Literature exam. This course would be in place of an English 10 or English 11 that is required.

### **DRAMA (Half year course – .5 credit – elective)**

This course will explore all facets of drama production. Students will examine stagecraft, direction, acting and various genres of plays. Students will engage in oral presentations that allow them to practice skills explored and studied. While students will produce and present a variety of short productions through the semester, the final assessment will be a full-length production to be presented to the school and community.

### **JOURNALISM (Full year course – 1 credit – elective)**

In this course students will gain skills in one or more of the following areas: page design, advanced publishing techniques, copywriting, editing and photography while producing a creative, innovative yearbook which records school memories and events. There is a strong emphasis on journalism skills and ethical principles. Students gain useful, real world skills in time management, marketing, teamwork, and design principles.

Prerequisite: Requires teacher approval before admittance. Students may take this class more than once.

## **MATHEMATICS**

### **ALGEBRA I (Full year course – 1 credit)**

With a 90-minute every-day structure for the school year 2022-23, Algebra I will guide students through a comprehensive study of all content eligible to be assessed on the Keystone Algebra I Exam. Using guided notes created by local teachers, as well as Ti-84+ calculators, students will study the following topics: linear equations/functions, 1-, and 2-variable inequalities, systems of equations, absolute value equations and inequalities, operations with exponents, polynomials and rational expressions, radical expressions and functions, data analysis and probability. Using Get More Math, students will practice skills both discretely (to build new skills), and cumulatively (for long-term retention). Ultimately, students will apply their knowledge to solve authentic real-world problems.

### **KEYSTONE ALGEBRA I (Full year course – 1 credit)**

This course is designed to complete the study of Algebra I. Mastery of basic computation is expected. The course will continue the development of skills and concepts necessary for students to succeed in upper level math and science courses by teaching students to approach problems in a logical and organized sequence of steps. Course content is aligned to Algebra I Keystone Anchors and begins with a review of integer operations, order of operations, evaluating expressions, solving one-step and multi-step equations, and working with functions. Students will progress to new topics that will include functions and their graphs, coordinate geometry, systems of linear equations and inequalities, exponents, polynomials, and data analysis and probability. Students will explore application problems that focus on developing problem solving skills. The graphing calculator will be introduced as a tool in exploring functions and graphs.

### **ALGEBRA 2 (Full year course – 1 credit)**

The main portion of this course broadens the topics that were first seen in Algebra 1 and deepens students' abilities to analyze situations and creatively solve problems. The students will study a variety of functions and their applications in the real world, as well as probability and statistics. With successful completion of this course, the student will be properly prepared for a Trigonometry course.

Prerequisites: Algebra I (can be taken the same year as Geometry, or after)

### **PROJECT BASED GEOMETRY (Full year course – 1 credit)**

In project-based geometry students learn geometric concepts through real world projects. Each project will consist of a career research portion and a physical hands-on project. Course content will be broken down into multiple projects throughout the year culminating with a student designed final project that represents students' cumulative learning. Course content begins with a single point and expands to include lines, angles, polygons, circles, and solids as well as congruence and similarity of figures. Students will develop problem solving skills as well as strengthen pre-existing algebraic skills. While homework will rarely be assigned, many of the projects will require work to be done outside of the classroom.

Prerequisites: Algebra I (can be taken the same year as Algebra 2, or after)



### **TRIGONOMETRY AND PRECALCULUS (Full year course – 1 credit)**

Students taking this course will develop deep knowledge of a variety of functions, as well as trigonometric applications as they create and evaluate methods for solving real-world problems. The use of graphing calculators and other technologies is emphasized as a problem-solving strategy. This course is highly recommended for students planning to attend college.

Prerequisites: Algebra I, Geometry (can be taken the same year as Algebra 2)

### **MATH 12 (Full year course – 1 credit)**

This course designed for high school seniors covers concepts associated with life after high school. Topics include budgeting time and money, saving and borrowing money, investment and retirement, renting vs. owning, paying for college, and how to choose and thrive in a career. Students will grow proficient with technology skills related to research and locating high quality web resources, analyzing mathematical situations with spreadsheets, and creating and maintaining databases. Students will also practice presenting information to a group of peers and public speaking. Students will also be instructed in portions of Probability and Statistics in preparation for possible career paths.

Prerequisites: Completion of 11th grade

### **CALCULUS (Full year course – 1 credit)**

This course provides the foundations of Calculus, connecting to physics and business applications. The course emphasizes limits and discontinuities, derivatives, and integration. Practical applications include related rates, maximum and minimum values of a function, concavity and points of inflection, area, volume, velocity, and marginal analysis problems. Students will also become proficient in selecting and using technology and other resources to guide successful study of the concepts covered, as well as in working collaboratively with peers.

Prerequisites: Algebra I, Geometry, Algebra 2 (Can be taken the same year as Trigonometry/Precalculus)

### **AP CALCULUS (Full year course – 1 credit)**

This course, when completed, thoroughly prepares students for taking the Advanced Placement Calculus AB exam. The course emphasizes limits and discontinuities, derivatives, integration, infinite series, summation, and differential equations. Particular skills are addressed across numerous types of functions and contexts. Practical applications include related rates, maximum and minimum values of a function, concavity and points of inflection, area, volume, velocity, marginal analysis, periodic phenomena, summation, accumulation, and differential equation problems. Students will also become proficient in selecting and using technology and other resources to guide successful study of the concepts covered, as well as in working collaboratively with peers.

Prerequisites: Algebra I, Geometry, Algebra 2, Trigonometry/Precalculus

## SCIENCE

### **Biology (Full year course – 1 credit)**

Biology is devoted to the study of living things and their processes. Throughout the year this course provides an opportunity for students to develop scientific process skills and an understanding of the fundamental principles of living organisms. Students will explore biological science as a process, cell structure and function, genetics and heredity, evolution and classification, diversity of living organisms and their ecological roles, and an introduction to animal structure and function. At the completion of this course, students will take the Biology Keystone Exam.

### **KEYSTONE BIOLOGY (Full year course – 1 credit)**

This is a remediation course for any student that tested basic or below basic on the Biology Keystone Exam. All information covered in the Biology course will be reviewed with special attention paid to those areas that data showed required more intense examination. There will be a strong focus on vocabulary and on extended response practice. At the completion of this course, students will retake the Biology Keystone Exam.

For the second half of the year, this course will provide a non-laboratory based introduction to basic concepts of chemistry. Topics include measurements, matter, energy, atomic theory, bonding, molecular structure, nomenclature, solutions, acids and bases. Upon completion, students should be able to understand and apply basic chemical concepts necessary for success in more advanced science courses.

### **ADVANCED BIOLOGY (Full year course – 1 credit) – Taught in alternating years sequence**

Through this laboratory-based course the students will investigate the structure and function of the human body. Topics covered will include the basic organization of the body; biochemical composition; and major body systems along with the impact of diseases on certain systems. Students will engage in many topics and competencies related to truly understanding the structure and function of the human body. Working from the topics of basic anatomical terminology to the biochemical composition of the human body, all the way into great detail of each of the major systems of the body, students will learn through reading materials, study guides, unit worksheets, group work, projects, and labs. Students will also compare and contrast the human body to the structure and function of other groups of organisms. Students will be responsible for proper use of lab equipment, lab reports, and projects assigned throughout each unit. One of the goals of this course is to prepare students with the skills necessary to be successful in future science classes in college.

Prerequisites: Must have passed the High School Biology course and either been proficient on the Keystone Exam or passed the High School Keystone Biology course.

### **PHYSICS (Full year course – 1 credit) – Taught in alternating years sequence**

This course is designed to teach students the basic concepts of Physics, specifically Mechanics. A secondary goal is to teach students to be effective problem solvers. Students are actively involved in laboratory activities where they are given the opportunity to make predictions and then observe the actual outcome. If time allows, students will study additional Physics concepts including waves, electricity, and magnetism.

Prerequisites: Biology, Algebra 2

### **CHEMISTRY (Full year course – 1 credit)**

This is a course of introductory chemistry. Topics include, but are not limited to, classifying and quantifying matter and energy, the phases of matter (especially water), the structure of matter at the atomic and sub-atomic levels, the periodic table and chemical bonds, including the types of compounds that result. The class culminates with investigations of the mole concept, percentage composition, empirical formulas, chemical equations and reactions and stoichiometry.

Prerequisites: Biology and the Keystones Exam for Algebra.

### **ENVIRONMENTAL SCIENCE (Full year course – 1 credit)**

Environmental science introduces students to the biosphere (Earth) and what affects it. This course deals with animals and natural resources and their interactions with society. Problems that face society, such as pollution and energy, are studied and discussed. The class will also conduct a formal debate involving the topics that are relevant to environmental science.

### **WETLANDS AND AQUATICS (Half year course - .50 credit)**

This course is arranged to teach students the different types of wetlands and aquatic ecosystems. The students will also look at the diversity of aquatic life (Fish, Reptiles, Amphibians, and Macroinvertebrates) and any adaptations the organism may have. Students will have to identify frog calls/sounds. Students will also look at ways to preserve wetlands. The students will learn to test water and learn how to make a stream more beneficial for living organisms. Students will leave this course with field guides for each type of aquatic life.

### **WILDLIFE ECOLOGY (Half year course-.50 credit)**

Through this course students will learn the natural history of wild birds and mammal species in Pennsylvania. Students will be able to identify and evaluate the habitat that each of the species lives in and to explain the niche (role) that each species has within their habitat. Students will be able to identify the basic needs that each species requires from its habitat and how to manage their habitat for them. Students will also learn to identify, describe, and explain any specific anatomical, physiological and/or behavioral adaptations of wildlife to their environment and how they help the animal survive. Students will have to define and explain terms to describe the species physical traits, behaviors, wildlife biology and wildlife populations, as well as to identify the trophic level of each species. Students will also have to identify bird calls. One of the goals of this course is to get students prepared for future studies about our environmental resources. (This will be based on the Pennsylvania Envirothon Wildlife Profile for that specific year.)

### **GEOLOGY (Full year course - 1 credit)**

This course will cover the main topics of geology. The course will be taking an in depth look at the processes that shaped Earth throughout history. Topics covered include rock and mineral identification, fossil identification, plate tectonics, volcanoes, and geologic history among others.

### **FORESTRY & PLANTS (Half year course - .50 credit)**

This course is designed to teach students about PA's forest. The students will learn about the history of PA's forest, current forest management techniques and trends, tools used in forestry, how trees and plants grow, forest invasive plants and insects pest, the scientific names of PA's trees and how to identify PA's trees using several techniques (bark, fruits, flowers, and leaves). Students will also be constructing a tree collection guide while completing this course.

### **ANIMAL SCIENCE (Half year course - .50 credit)**

This course is designed to introduce students to the different livestock that are raised throughout PA and their economic impact. The students will be taught how to identify the different breeds, their breed strengths and breed characteristics, where they originated, the external parts and any meat cuts associated with them, and many vocabulary terms associated with the breed. Students will look at dairy and beef cattle, pigs, poultry (chickens, ducks, and turkeys), goats, sheep and horses.

### **PLANT SCIENCE (Half year course - .50 credit)**

This course is designed to introduce students to the agricultural system. Students will be taught the basic principles of plant growth as it applies to crop production. Students will learn to identify weeds and crop species that are common to our area, the life cycle of the species and how to control the growth of the species. Students will look at the different farming techniques used in agriculture, their pros and cons and the tools used for each technique. They will also be taught how to take a soil test, to interpret the soil test and how to use the Agronomy Guide in correlation with the soil test. They will also have to calculate acreage and figure out the cost/profit for a piece of land. Students will also be constructing a weed/crop collection guide while completing this course.

### **WILDLIFE I (Half year course - .50 credit)**

The wildlife course is dedicated to the care and preservation of Pennsylvania plants and animals. Students will study habitat development and other ways to increase wildlife. They will also examine methods for controlling wildlife growth and preventing damage to wildlife. This class will include classroom, shop, and outdoor activities.

### **WILDLIFE II (Half year course - .50 credit)**

A deeper continuation of Wildlife I. Students observe examples of how introducing different species affects other species within an ecosystem. This wildlife biology class does a hands-on approach to plant and animal wildlife.

### **GENETICS (Half year course – .50 credit)**

This course discusses the principles of genetics with the study of biological function at the level of molecules, cells, and multicellular organisms, including humans. The topics include: structure and function of genes, how traits are passed from parents to offspring, biological variation and inherited disease. This course will also cover mutations and how they could affect the overall evolution of a species. The prerequisites for this course include proficiency on the Biology Keystone Exam or completion of the Keystone Biology course.

### **FORENSICS (Half year course - .50 credit)**

This course is designed to provide a basic foundation in the field of criminalistics to students who are interested in the use of science to solve crimes. It will provide an introduction to the application of scientific methods for the examination of physical evidence in the criminal justice system. This course will include but is not limited to fingerprints, DNA, genetics, evidence collection and insect reproduction and growth patterns. This course will also include discussions on how popular culture has affected forensics from a legal, science and a perpetrator's point of view. The prerequisites for this course include proficiency on the Biology Keystone Exam or completion of the Keystone Biology course.

### **AP ENVIRONMENTAL SCIENCE (Full year course – 1 credit)**

Through this interdisciplinary course, the students will be given the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. One of the goals of this course is to prepare students with the skills to be successful in future environmental science classes in college.

Prerequisites: The prerequisites for this course are that you must have passed the High School Biology course and either been proficient on the Keystone Exam or passed the High School Keystone Biology course and passed the High School General Environmental Science Course.

### **SCIENCE & TECHNOLOGY IN SOCIETY (STS) (Full Year Course – 1 Credit)**

This course studies the relationship between scientific discovery and knowledge, technologic innovation, and society both past and present. Students will explore how modern technology and science affect our lives today, and in turn, will examine how society affects advancement in science and technology.

## **SOCIAL STUDIES**

### **UNITED STATES HISTORY II (Full year course – 1 credit)**

A study of the history of the United States since the era of Reconstruction following the Civil War to the 1910s --focusing on political, economic, and social events related to industrialization and urbanization, major wars, domestic and foreign policies, reform movements, immigration, etc. Students will study geographic influences and causes and effects of major historic events. They will examine modern constitutional issues and analyze efforts to expand the democratic process. The class will spotlight the labor movement, artistic and cultural influences on American history, the impact of technology upon American History and develop the students' use of critical thinking skills to interpret historical methods, points of view, and place events in historical context.

### **UNITED STATES HISTORY III (Full year course – 1 credit)**

A study of the history of the United States since the 1920s through the Vietnam War --focusing on political, economic, and social events related to industrialization and urbanization, major wars, domestic and foreign policies of the Cold War and post-Cold War eras, reform movements (including the Civil rights movements). Students will study geographic influences on major historic events and causes and effects of the Great Depression, examine modern constitutional issues, evaluate the relationship of the three branches of the federal government, and analyze efforts to expand the democratic process. The class will spotlight the labor movement, artistic and cultural influences on American history, the impact of technology upon American History and develop the students' use of critical thinking skills to interpret historical methods, points of view, and place events in historical context.

### **WORLD HISTORY I (Full year course – 1 credit)**

One of the objectives for this class is to show how early civilizations came about, how they expanded and how their improvement in technology help each civilization to grow and prosper. The second objective is to show the students what life was like in the early years of civilization and how their way of life, in some parts of the world, has not changed that much from early times. The last objective is to show the students how inventions of the early civilizations impacted the world. The Greeks, Romans and other early civilizations will be studied and discussed.

### **WORLD HISTORY II (Full year course – 1 credit)**

World History explores the key events and global historical developments since 1100 A.C.E. that have shaped the world we live in today. The scope of World History provides the latitude to range widely across all aspects of human experience: economics, science, religion, philosophy, politics & law, military conflict, literature & the arts. The course will illuminate connections between our lives and those of our ancestors around the world. Students will uncover patterns of behavior, identify historical trends and themes, explore historical movements and concepts. Students will refine their ability to read for comprehension and critical analysis; summarize, categorize, compare, and evaluate information; write clearly and convincingly; express facts and opinions orally; and use technology appropriately to present information.

### **SOCIOLOGY (Full year course – 1 credit)**

This heterogeneous course is designed to make students more aware of the various roles that individuals play in society. This course will investigate such important contemporary issues as family roles, gender stereotyping, racism in America and the world, crime and the criminal justice system, the educational system, and recent social movements. Each topic will be researched and discussed in an open forum.

### **CIVICS (Full year course – 1 credit)**

This course is designed to teach students how the American Constitution is the basis for all government decisions in the United States. Students will learn the roles and functions of the three branches of government and how each interacts with the other. This course will also cover human rights, the election process, and campaigning. Students will also review early forms of governments and how they have shaped the current government of the United States.

### **AP US HISTORY (Full year course – 1 credit)**

The AP U.S. History course focuses on the development of disciplinary practices and reasoning skills and an understanding of content organized around seven themes: American and National Identity, Politics and Power, Work, Exchange, and Technology, Culture and Society, Migration and Settlement, Geography and the Environment, America in the World. The course is divided into nine chronological periods (some units overlap chronologically due to the different concepts covered in each unit). In this course, you'll develop the AP history disciplinary practices and reasoning skills such as: analyzing historical evidence, argument development, contextualization, comparison, causation, and continuity and change over time. This course is offered every other school year.

### **PSYCHOLOGY (Full year course – 1 credit)**

This course is based on the systematic study of individual human behavior and experience. The content will include the general academic overview of psychology, including its vocabulary, research methods, and important individuals within the area of psychology. It will also present the general methods of scientific investigation as they are applied to human behavior. It is a broad academic survey of problems, methods, facts, and principles. The course content will give students the opportunity to examine and reflect upon their beliefs, attitudes, and feelings about themselves and their ideas of what people are like and why they behave as they do. Topics included: personality, intellectual abilities and adjustments, learning skills, emotions, motivation, personality disorders, thinking and biological influences of behavior.

This course is offered to 11th and 12th graders only.

11<sup>th</sup> graders taking Psychology must also be enrolled in World History.

### **ECONOMICS (Full year course – 1 credit)**

The general objective of a high school economics course is for students to master fundamental economic concepts, appreciate how the principal concepts of economics relate to each other and understand the structure of economic systems. Students will use economic concepts in a reasoned, careful manner in dealing with personal, community, national and global economic issues. They will use measurement concepts and methods such as tables, charts, graphs, ratios, percentages and index numbers to understand and interpret relevant data. They should learn to make reasoned decisions on economics.

This course is offered to 11th and 12th graders only.

## **AGRICULTURE**

### **INTRO TO VOCATIONAL AG SHOP (Half year course – no credit, for 7th and 8th grades)**

This course will introduce the students to the areas taught in the Vo-Ag shop throughout the 9th through 12th grades. The course is basic with an emphasis placed on woodwork. The students will learn to measure, cut, shape, attach, and finish wood. Students will learn to use the rules and regulations book provided by the Pennsylvania Game Commission. Students will develop the ability to identify shop and hand power tools. Students will be required to know and demonstrate shop safety. All activities and projects revolve on a two year cycle. All students must take this class in 7th or 8th grade, depending on the year it is offered.

### **BASIC BUILDING SKILLS (Half year course - .50 credit)**

In today's world, everyone should be able to perform some basic construction, even if it is a simple repair job in his/her home. Therefore, this course will teach beginner woodwork, metalwork, plumbing, and block laying/concrete work.

### **FFA and AG LEADERSHIP/TRACTOR CERTIFICATION (Half year course - .50 credit)**

Students in this class will study topics in the Future Farmers of America program and will learn how to become a leader in agriculture. The following topics will be studied: public speaking, parliamentary procedure, a review of contests used in FFA competition, and a thorough study of agriculture related vocations.

This class will be taught entirely from the state certification curriculum. All students 16 years of age and under must have a certificate to legally drive a tractor on the road unless they are working for their parents. This course will prepare students toward achieving a tractor certification.

### **HORTICULTURE (Half year course - .50 credit)**

Horticulture is a diverse field involved with producing and utilizing a multitude of 5 specialized plants. Benefits of this industry to all people are both physical and emotional. Horticulturists provide the fruits and vegetables so important to good nutrition. Horticulturists also improve the human environment, through both beautification and conservation, by providing the ornamental plants and designs utilized to enhance aesthetics within and around the home, workplace, and other areas.

### **SMALL GAS ENGINES (Half year course - .50 credit)**

This class is for the student who is interested in the workings of small engines. Students will work with 4-cycle Briggs and Stratton engines (provided by the school). They will perform a complete tear-down and rebuild during this class. Upon successful repair of the school engine, the students will be permitted to work on engines from home.

### **WELDING (Half year course - .50 credit)**

This course is designed for the beginner Welder. Students will be taught the safety and use of the Gas torch, Arc welder, and Mig welder. Common welds and cuts will be taught and graded throughout the semester. Students will discuss employment in this field. Proper clothing will be required.

### **VETERINARY SCIENCE (Half year course - .50 credit)**

Veterinary Science is a class used to further the knowledge of a student in the health and growth of animals. Students will learn different species and the breeds in each. Diseases and common health problems will be explored. Causes and cures will be studied.

Prerequisites: Proficiency in the Biology Keystone Exam or passing of Keystone Biology.



## ART

### **CERAMICS (Half year course - .50 credit)**

In this introductory ceramics course, students will be exposed to basic hand building procedures with an emphasis on pinch, coil and slab methods. A variety of both utilitarian and non-utilitarian projects will be constructed. Students will also engage in fundamental glazing and firing techniques. All projects will include exposure to various ceramics tools, techniques and vocabulary.

Upon taking this course a second time students will be expected to demonstrate learned skills from the previous class and will be held to higher expectations. They will create pieces such as mugs, bowls and plates, as well as sculptural pieces such as terra-cotta warriors that reflect the students own personality and understanding of the material they learn. This course must be taken before students are eligible for Advanced Ceramics.

### **ADVANCED CERAMICS (Half year course - .50 credit)**

In this higher level ceramics course, students will be exposed to more complex hand building procedures with an emphasis on sculpture, building large, and throwing on the wheel. A variety of both utilitarian and non-utilitarian projects will be constructed. Students will learn more about how clay and glazes are made, how a kiln functions, and how to recycle clay. Students will be expected to think critically about the functionality of a piece or about the aesthetics of the piece. Students will learn how to create unity in their piece, how to make it visually appealing, and how to create a piece that evokes thought in the viewer.

### **WELDING ART (Half year course - .50 credit)**

During this unique course, students will learn basic welding skills needed to construct art works. The student will be designing and creating multiple metal projects, functional and decorative. These skills will include soldering, oxy-acetylene, mig and arc welding. The welds may include brazing, cutting, gas welding, flat welds, 90 degree, horizontal, and vertical welding and these welds will be accomplished using various machines and rods. Students are encouraged to bring in their own metal supplies to supplement what is provided. The student is responsible for gathering materials needed for the day, using the materials correctly, and for properly cleaning and storing materials.

### **ADVANCED PLACEMENT STUDIO ART (Full Year course - 1 credit)**

The AP Studio Art: 2-D Design course is intended for highly motivated students who are seriously interested in the study of art. The College Board's Advanced Placement Program (AP) enables students to pursue college-level studies while still in high school. AP provides willing and academically prepared students with the opportunity to earn college credit, advanced placement, or both. AP course requirements are significantly more rigorous, and require students to develop mastery in the concept, composition, and execution of their artistic ideas. (SC2) It is recommended for the AP student to have previous training in art or be able to demonstrate through a portfolio an ability to create fine art.

The AP Studio Art: 2-D Design is intended to address two-dimensional (2-D) design issues that involve purposeful decision making utilizing the elements and principles of art in an integrative way. The principles of design (unity/variety, balance, emphasis, contrast, rhythm, repetition, proportion/scale, figure/ground relationships) can be expressed through the visual

elements (line, shape, color, value, texture, space). These elements and principles of design help guide artists in making decisions about how to organize an image on a picture plane in order to communicate a message.

3D Design will also be integrated into the course. Students may explore clay, fabrics, or other three dimensional media.

AP Studio Art is not based on a written exam; instead, students submit portfolios for evaluation at the end of the school year. For this portfolio, students are asked to demonstrate understanding of 2-D and 3-D design through any two-dimensional or three-dimensional medium or process, including, but not limited to, graphic design, digital imaging, photography, collage, fabric design, ceramics, paper mâché, weaving, fashion design, fashion illustration, painting and printmaking.

The AP course concludes with a college-level assessment, in this case, a portfolio of artwork that will be scored by college and university faculty as well as experienced AP teachers.

Along with submitting a portfolio for review, students will study artists and trends in art making. Students are also expected to do research and visit galleries and the local art museums on their own time, or during a scheduled field trip.

Finally, students will keep a sketchbook to be composed of visual ideas, notes, photos, doodles, plans, short assignments, quick drawings, and practice of various techniques. Many art schools like to see students' sketchbooks as documentation of how their minds and creativity work.

Must be in 11th or 12th grade (unless teacher approved). Must have had at least 2 other art classes (7th and 8th art not included)

### **INTRODUCTION TO PHOTOGRAPHY (Elective Half-Year Course - .50 credit)**

This course will allow students to learn the fundamentals of digital photography while also becoming more comfortable with composition, the camera, and editing software. Students will discover the history of photography while also experimenting with cameras and digital software for editing. Students will explore and evaluate their work by several critique methods, completing assessments, and selecting several photographs to put on display for the spring art show.

Throughout the duration of this course, students will:

- Explore photography
- Discover photography concepts and terms through art criticism and art production.
- Learn about famous photographers and movements throughout history.
- Apply aesthetic judgment when viewing photographs.
- Know the guidelines to composition and how they affect a composition by using basic guidelines.
- Maintain classroom cleanliness.
- Make the most out of every photograph they create!

### **ADVANCED PHOTOGRAPHY (Elective Half-Year Course - .50 credit)**

This class is an advanced study of photography that focuses on the building and creation of a photo portfolio. **SERIOUS PHOTOGRAPHERS ONLY!**

This class provides a more intense study of photography that is designed for students who want to concentrate their artistic and photographic efforts at a more advanced level. Much of this class will be seminar based, with a focus on constructive feedback and implementing personal and visual communication. Students will create an artist statement

and execute that idea through their personal portfolio of photographs. Students are required to complete all assignments to the best of their abilities and abide by the school handbook, especially with the cell phone policy.

This class has a prerequisite of Intro. To Photography and is at the discretion of the teacher)

### **DIGITAL ART (Elective Half-Year Course - .50 credit)**

This course will allow students to learn the fundamentals of digital editing software. Students will discover the background to Digital Art while also experimenting with digital software for editing photographs as well as creating original artwork. Students will explore and evaluate their work by several critique methods, completing assessments, and selecting several completed works of art to put on display for the spring art show.

Throughout the duration of this course, students will:

- Explore digital art
- Discover digital concepts and terms through art criticism and art production.
- Learn about famous digital artists and movements throughout history.
- Apply aesthetic judgment when viewing art work.
- Know the guidelines to composition and how they affect a composition by using basic guidelines.
- Maintain classroom cleanliness.
- Make the most out of every art work they create!
- Learn about different fields of digital art.

### **WORLD CULTURES IN ART: PHASE IV 7TH & 8TH GRADE (Half year course - No credit)**

This course will allow students to become well rounded in the fundamentals of global art. The course is strongly influenced by cultures throughout the world. Students will discover art history while also experimenting with new media. Students will also explore and develop who they are as individuals. Students will explore and evaluate their work by several critique methods, completing assessments and selecting several pieces of art to put on display for the spring art show.

Throughout the duration of this course, students will:

- Explore art through a variety of media.
- Discover art concepts and terms through art criticism and art production.
- Explore & learn about art from around the world.
- Apply aesthetic judgment when viewing art.
- Create art based on global art techniques and processes.
- Explore who they are as individuals.
- Maintain classroom cleanliness.
- Make the most out of every project they create!

### **MEDIA EXPLORATION IN ART: PHASE IV 7TH AND 8TH GRADE (Half year course - No credit)**

This course will encourage students to think more creatively about the fundamentals of art through different mediums. The course is strongly influenced by medium exploration and developing a personal meaning within artworks. Students will be learning more about themselves as they learn more about materials they will work with. As students build a

collection of work over the semester, they will participate in critiques of their work, as well as selected pieces of art to put on display for the art show in the spring.

Throughout the duration of this course, students will...

- Investigate the properties of different mediums.
- Apply personal characteristics within their artwork.
- Explore concepts and art principles through art production.
- Maintain classroom cleanliness.
- Make the most out of every project they create.

### **DRAWING I (Half year course - .50 credit)**

In this course, students will learn the basics of drawing such as different techniques, the elements and principles of art and design. Students will keep a sketchbook in which they will practice various drawing exercises to assist them in artistic growth. Students will experiment with "Drawing on the Right Side of the Brain" by drawing images upside down, drawing with their dominant and non-dominant hand, etc. Students will utilize a wide variety of media such as drawing pencils, charcoal, chalk and oil pastels, ink pens, and markers. Students will learn about various artists and their styles throughout the course as well. Students will learn how to create value in their work through shading to create a convincing work of art.

### **GENERAL 2D ART (Elective Half-Year Course- .50 Credit)**

This course will allow students to learn the fundamentals of 2D art while also becoming more comfortable with materials, tools, mediums and the studio setting. Students will discover art history while also experimenting with new, two-dimensional media. Students will explore and evaluate their work by several critique methods, completing assessments and selecting several pieces of art to put on display for the spring art show.

Throughout the duration of this course, students will:

- Explore art through a variety of two-dimensional media.
- Discover art concepts and terms through art criticism and art production.
- Learn about famous artists and movements throughout history.
- Apply aesthetic judgment when viewing art.
- Know the elements of art and how they affect a composition by using the principles of design.
- Maintain classroom cleanliness.
- Make the most out of every project they create!

### **PAINTING (Half year course - .50 credit)**

Painting is an exploration of color theory, different paints and many painting techniques. Relationships between the basic fundamentals of art, both elements and the principles of design, will be emphasized as students study introductory painting techniques and materials.

Students will focus on tempera and acrylic painting media. Exploration of styles, artists, subject matter, and painting media will be addressed.

### **FLEECE TO SHAWL (Half year course – .50 credit)**

Fleece to Shawl is a process of combing (carding) wool from a sheep, spinning it into yarn, and then weaving it into a wearable shawl. This course may require students to participate in caring for our sheep as well as aiding our Fleece to Shawl teams in preparing for the annual competition in January at the Pennsylvania Farm Show in Harrisburg. This course will introduce students to the competitive aspect and process of Fleece to Shawl. Topics and techniques covered may include hand weaving, warping a floor loom, skirting and carding wool, weaving on a floor loom, spinning wool, plying wool, cleaning and blocking wool shawls, preparing artwork for sale, handling and maintaining Fleece to Shawl equipment, various dyeing methods, silk painting, shibori, batik, embroidery, sewing, knitting, crocheting, and various other textile artforms, all of which will provide students with rich investment in experimentation as well as a deeper understanding of the historical and cultural impacts of each unique textile artform, making strong connections with our rural community. This course may be used as an Art credit. Once the competition is finished students will begin to create their own warp to be used in competition the following year or students will create pieces from the fabric media like blankets, hats, quilts, or other useable items.

### **General 3D Art (Half-Year Course - .50 Credit)**

This course is a study of basic principles of three-dimensional visual organization and skills. It includes the Elements of Art and the Principles of Design as they relate to form and three-dimensional art and design, allowing students to learn the fundamentals of 3D art while becoming more familiar with various art tools, materials, and mediums in an art studio setting. This course will drive students to create more involved artworks, pushing past 2-dimensional into the realm of 3-dimensional. Artworks will be able to be seen from multiple view points and perspectives. The course is strongly influenced by sculptural mediums, such as cardboard, plaster, paper maché, and more. Students will explore and evaluate their work through the use of several critique methods, completing assessments. As students build a collection of work over the semester, they will participate in critiques of their work as well as select pieces of art to put on display for the art show in spring.

### **FIBERS (Half year course - .50 credit)**

This course will introduce students to the both ancient and modern day art form of textiles. Students in this course will explore the media of textiles through its vast and varied history, focusing on elements such as textiles as historical documents, clothing and artworks. Students will study various elements of textile history and fabric manipulation techniques. With each unit students will create a small reflective artwork of the area studied which will focus upon an overarching rural theme. Topics and techniques covered will include dyeing, fabric painting and transfer, shibori, batik and embroidery all of which will provide students with rich investment in experimentation as well as deeper understandings of the historical and cultural impacts of each unique textile form. A cumulative quilt will serve as the final project, which will incorporate and highlight all the elements learned, as well as thorough research completed throughout the semester. This collaborative quilt will echo an element of rural history, culture and or traditions selected at the beginning of the course.

### **A WORLD OF COLOR (Half year course - .50 credit)**

Throughout this course students will study in depth the history, cultural uses and importance as well as the physical properties of color. Students will develop through research, reading, writing and experiences an understanding of the way that color is an element of all disciplines such as the arts, sciences and humanities. The course will progress as if traveling through the color wheel itself. Every unit will be based upon a different color. Within each unit students will examine the

use of color through dyes, paints, and various mediums. They will interpret the ways that color has been used to communicate in nature and culture, study biological and psychological aspects of color perception, enjoy the use of color in the production of images, objects, performance, environments and experiences, and understand the physical properties of color. As students carefully study each color they will document their journey through constant journaling within a research notebook. With the conclusion of each individual color investigation students will create a small reflective piece in their research notebooks which will serve as a strong foundation for their final project. The culminating project for this course will be the creation of a presentation and project based upon a topic specific to color theory, history and or cultural impacts. Students will present their topic as well create an artwork based on their research.

### **PRINTMAKING AND BOOK ARTS (Half year course - .50 credit)**

This course will begin with students learning to make their own paper and constructing a book that will act as a journal for the semester. Students will then fill this book with the various forms of printmaking they complete throughout the semester. Students will do screen printing, block printing and other forms of printmaking. Students will create various prints by carving laminate printing blocks, metal relief blocks, making stencils, using screens and more. Students will complete a color collage between each project. This collage will teach students how to organize a work so that it will be balanced, have unity, be visually appealing and evoke thought in the viewer.

Students may also fill the pages of their books in various other ways. Students may press flowers, do scrapbook pages, design and print stickers, collage, and others. In one of the final projects for this class students will create potion bottles. Students will create, name, and come up with an ingredient list for their potions. They will then create labels for their bottles and design a wax seal stamp to close the bottle. The labels will be printed using one of the printmaking techniques learned during the semester.

### **WATERCOLOR AND PLEIN AIR PAINTING (Half year course - .50 credit)**

In this course students will learn about color theory, the elements, and principals of art. Students will explore new watercolor techniques and explore plein air painting (the art of painting from the ever-changing natural environment). Students will explore pen and ink with watercolor, landscape, and other techniques such as painting with tea, coffee, or naturally made watercolors. Students will also observe how the medium is affected by salt, alcohol and other items. Through their work students will learn how to create works in two and three point perspective and learn about how atmospheric perspective affects shapes and colors.

### **AMERICAN ART HISTORY (Half year course - .50 credit)**

This unique art history course will offer students the opportunity to explore the story of art through the history and evolution of artists and artworks of America, her history, environment and culture. Students will study in depth through reading, writing, small studio creation, discussions, museum visits and related experiences the way in which the American history, culture, and landscape has impacted art forms and artists, as well as the significant ways in which artists broke boundaries and created a unique American identity represented through visual expression. Students will study areas and topics of art history as it developed throughout the timeline of the history of America, beginning with those who inhabited these lands prior to any colonial settlements, continuing through in the first semester, to the Civil War. Students will document their American journey through constant journaling, note-taking and experiences within a research notebook which will serve as a rich foundation for the final project. The culminating project for this course will be the creation of a presentation and project based around a topic specific to American art, history and or culture. Students will present their topic as well create an artwork based off their research.

### **ANCIENT ART HISTORY (Half year course - .50 credit)**

During this course, students will study artists and specific art pieces throughout different time periods of art, making connections with geography, important historical events, prominent people throughout time, and multicultural influences. Starting with ancient art periods and working up to modern art periods, students will build a visual library of artworks during this class as well as learn vocabulary terms associated with artist styles, movements and mediums. By the end of this course, students will begin to see how much art has influenced different things in the world from fashion trends to politics. This course will require daily reading and writing assignments, including reflective written critiques, as well as a major research project involving a specific piece of artwork.

Course Objectives:

- Develop a timeline of art history
- Recognize art mediums and materials
- Distinguish various art styles and movements
- Create works of art that align with a style in history
- Become an art historian and present on a specific piece of artwork

### **MODERN ART HISTORY (Half year course - .50 credit)**

During this course, students will study artists and specific art pieces throughout different time periods of art, making connections with geography important historical events, prominent people throughout time, and multicultural influences. Starting with modern art periods and working up to contemporary, present-day art, students will build a visual library of artworks associated with specific modern artists during this class as well as learn vocabulary terms associated with artist styles, movements, and mediums. By the end of this course, students will begin to see how much art has influenced different things in the world from fashion trends to politics. This course will require daily reading and writing assignments, including reflective written critiques, as well as a major research project involving a specific modern artist.

Course Objectives:

- Develop a timeline of art history
- Recognize art mediums and materials
- Distinguish various art styles and movements
- Create works of art that align with a style in history
- Become an art historian and present on a specific modern artist

### **RECYCLED ART (Half-Year Course - .50 credit)**

This course will encourage students to use 100% recycled materials to create various artworks. Artworks will be able to be seen from multiple view points and perspectives and have multiple functions. The course is strongly influenced by sculptural mediums, with 3-D products being the focal point. Some mediums include but are not limited to magazines, newspaper, plastic bottles and containers, bottle caps, soda cans, soda can tabs, cardboard, discarded items such as buttons, keys, paper scraps of any kind, old keys, old toys, old books, old electronics and/or electronic parts, old clothes or fabric scraps, etc. (basically anything that can be given new life through “up-cycling” into art). Students will be required to bring in recycled items throughout the entirety of this course. Students will face challenges in producing

artwork with materials they may have never even thought of using before! Students will learn about the importance of recycling, discuss how art and creative expression impacts our planet, and discover professional artists who have made a career of using recyclables to create their masterpieces.

## **FAMILY AND CONSUMER SCIENCES**

### **COOKING ON A BUDGET (Half year course - .50 credit)**

This course introduces students to food and kitchen safety, measurements, recipe standardization and scaling, plate costs, food budgets, knife skills and cooking methods. Products made will include soups, eggs, stir-fry rice, bean, pork and chicken dishes. The course includes several cooking labs and field trips. An emphasis will be placed on using local and seasonal products to cook nutritious and affordable family meals.

### **DESSERTS ON A BUDGET (Half year course - .50 credit)**

This course introduces students to the fundamentals of hot and cold dessert production. Topics of study will include nutritional and cost considerations, ingredient substitutions and the integration of the dessert with the meal. Products made will include sauces, frozen desserts, soufflés, cakes, pies and pastries. Prerequisite: Students must have successfully completed Cooking on a Budget or similar program at another district.

### **LIVING ON YOUR OWN (Half year course - .50 credit)**

This course is designed to prepare students to live on their own. Topics will include budgets, managing money, credit cards, housing needs, meal management, and making wise consumer decisions. Activities include research, simulations, comparison shopping, and lifestyle/career options.

### **FAMILY LIFE (Half year course - .50 credit)**

This course offers an introduction to various aspects of human relationships. Topics include: communication, conflict resolution, dating violence, choosing a life partner, families in crisis, early childhood development, concerns for older adults, death and grief.

## **BUSINESS**

### **INTRODUCTION TO BUSINESS (Half year course - .50 credit)**

In this course the students learn the basic knowledge and skills necessary to understand the business world. Through simulations, projects, and films together with lectures and discussions, students learn about basic economics and social responsibility, credit, insurance, and investing.

Prerequisite: This course is required before any other business courses may be taken.



### **SALES & MARKETING (Half year course - .50 credit)**

This course includes an introduction to marketing today as well as its economic and business foundations. Students complete marketing projects, analyze realistic business situations, and learn about career opportunities.

Prerequisite: Successful completion of Introduction to Business course.

### **MICROSOFT OFFICE (Half year course – .50 credit)**

This course is designed to teach students the basics of how to use Microsoft Office. We will start out with learning about the different parts of a computer and what its function is. Then we will move on to learning about Microsoft Programs. This will utilize programs such as Word, Excel, PowerPoint, and OneNote. **This is a fast paced class with a heavy work load in both research and writing.** We are looking to add a certification option to this class if it is taken a second time. At the end of it you will be taking the equivalent of an AP test and be come certified in MOS Word, MOS EXCE, MOS PowerPoint.

## **COMPUTER SCIENCE**

### **COMPUTING IDEAS (Half year course – .50 credit)**

The Computing Ideas course is a first computer science course introducing the basics of programming with Karel the Dog, the basics of designing a web page, and how information and images are represented with computers. Students will learn to code using blocks to drag and drop, but they can switch between blocks and text as desired. Students will create a portfolio on the web of projects they build throughout the course.

### **PROGRAMMING - JAVASCRIPT (Half year course – .50 credit)**

This course teaches the foundations of computer science and basic programming, with an emphasis on helping students develop logical thinking and problem-solving skills. This course will serve as a stepping stone to future courses in computer science.

### **DIGITAL VIDEO PRODUCTION 1 and 2 (Full year course – 1 credit)**

In this course, students will learn the introductory skills to recording and editing digital video. Students will learn how to use and care for video equipment and how to edit digital video using Adobe Elements. Students will be responsible for the planning, recording, and editing of video announcements for the school as well as assigned projects throughout the year. Projects will include Public Service Announcements, Senior Slideshow, Music Videos, and Extra Curricular Highlight videos. Students will be required to attend one extracurricular activity during the year and record, edit, and present a highlight video to the school.

Prerequisites include instructor permission, 9th grade status, and ability to attend an after-school activity for project completion.

### **VIDEO GAME DESIGN (Full year course – 1 credit)**

The CodeHS video game design curriculum teaches the foundations of creating video games in JavaScript. While this course is introductory, it is an honors-level course. Its curriculum teaches the foundations of computer science and basic programming, with an emphasis on helping students develop logical thinking and problem solving skills. Once students complete the course, they will have learned material equivalent to a semester college introductory course in Computer Science and be able to program in JavaScript.

Prerequisites include completing either Computing Ideas or Programming JavaScript

### **MOBILE APPS (Half year course – .50 credit)**

Mobile applications are becoming increasingly important to our consumption of media, news, social interaction, and learning. In this course, students will learn how to create mobile apps using React Native, a popular platform-agnostic framework developed by Facebook and used by successful tech companies including Airbnb, Facebook, Instagram, Tesla, and more. As an online blended high school course, students will design and build applications to run on their own smartphones and will use the latest tools and technologies available for mobile app development.

Prerequisites are the completion of both Computing Ideas and Programming JavaScript

### **FUNDAMENTALS OF CYBERSECURITY (Full year course —1 credit)**

This is the first course in the cybersecurity pathway and will prepare student for an advanced cybersecurity course and/or cybersecurity certification(s). Students will learn cybersecurity topics such as software security, networking, system administration, and the basics of cryptography and programming.

Prerequisite of Computing Ideas class

### **WEB DESIGN (MONET) (Half year course – 0.5 credit)**

In this project-based course, students will learn how to build their own web pages using the languages of HTML and CSS. They will create their own live homepages to serve as portfolios of their creations.

### **WEB DESIGN (PICASSO) (Full Year course – 1 credit)**

This is a project-based course that teaches students how to build their own web pages. Students will learn the languages HTML and CSS, and will create their own live homepages to serve as portfolios of their creations. Students will finish this course with tangible, professional, mobile responsive websites.

### **Data Structures in C++ (Full Year course – 1 credit-elective)**

The Data Structures course in C++ teaches students about advanced data structures such as maps, queues and sets, while applying them in larger, real-world assignments and projects.

Prerequisites are the completion of both Computing Ideas and either JavaScript or Python

### **High School Robotics (Half year course -.50 credit-elective)**

VEX Robotics Curriculum is divided up into twelve primary units and one optional unit. In a flexible format, students learn about engineering and engineering problems solving. They will be given introductions to the VEX Robotics Design System while learning key STEM principles through a process that captures the excitement and engagement of robotics competition. The curriculum is heavily focused on mechatronic principles; as such, programming is NOT required. However, this course is structured in such a way that teachers and students who want to include a more Computer Science heavy layer with the course can do so.

### **Advanced Robotics (Half year course-.50 credit-elective)**

Students in this course have the goal to help build and test the robot's that will be used in Vex Robotics competitions. It is designed in order to help the students better prepare for competition season. They will also, be going through curriculum designed to help them learn how to program robot brains. The students in this course will be looked at as teacher aids, helping the classroom teacher assist the general robotics students.

Prerequisites are to have completed the High School Robotics class with a passing grade. Also, must be a part of the competition Robotics Club.

## **FOREIGN LANGUAGE**

### **DISTANCE LEARNING FOREIGN LANGUAGE (Half year course – .50 credit )**

Distance Learning Foreign Language provides students the opportunity to study a foreign language on a computer. The languages currently offered are Spanish, French, German, Chinese and Latin. The course requires a strong work ethic and is geared toward the independent learner.

## **HEALTH/PHYSICAL EDUCATION**

### **NUTRITION and FITNESS (Half year course - .50 credit)**

During this course the students will develop a greater knowledge of their bodies and the function of foods that individuals take in on a daily basis. The students will differentiate between myths and facts of diets, foods, and medications as they relate to teens. This course will further the students' knowledge about their current health, fitness level and the nutritional values of foods eaten by teens.

### **OUTDOOR EXPLORATION (Half year course - .50 credit)**

This course will have an emphasis upon fishing and boating. Students will explore both fly and spin casting equipment. They will learn CPR and water safety techniques. At the end of the unit students will take a trip to fish at a pond or stream. Other outdoor activities covered may include: hiking, archery, and canoeing/boating.

### **HEALTH, WELLNESS (Half year course - .50 credit)**

This course will focus on a deeper examination of the health issues facing teens today. Students will discuss dealing with problems and challenges in a healthy manner and will study first aid, CPR, sexual education, tobacco, alcohol, and other drugs. Nutrition, fitness and health related current events will be discussed on a weekly basis. This course will present basic rules, skills, and teamwork with others in games and activities. Emphasis will be placed on lifetime sports, personal growth, cooperation and fitness.

### **SPORTS SCIENCE (Half year course - .50 credit)**

This course will analyze the areas of sport in society, the psychology of sport, injury prevention, and anatomy and physiology. Students should be prepared to complete projects, interact with classmates in hands-on activities and engage in class discussions. No prerequisite required, however sports and sport discussions, which include: Title IX, concussions, athletes and social media, and mascot/team names will be included.

## **MUSIC**

### **CHORUS (Full year course – .50 credit)**

This course is open to any secondary student who enjoys singing, or would like to learn how to sing better. Students will study proper and healthy vocal technique and will learn to sing standard choral repertoire from a variety of musical styles and musical time periods in a choral ensemble setting. Students are required to perform in the Winter and Spring Concerts, as well as perform for the Graduation Ceremony after the last day of school. Private lessons will be offered to students as a part of the choral curriculum. Students who participate in chorus may also participate, upon invitation by the director, in District Chorus. This course may be taken more than once for credit.

### **MUSIC IN AMERICA (Half year course - .50 credit)**

This is a music appreciation course designed for students with little or no prior music background. The focus of this class will be on understanding and analyzing the diverse musical styles found here in America, with an emphasis on Jazz, Blues, and the influence of Latin American music on the Rock and Roll genre.

### **MUSIC THEORY I (Half year course - .50 credit)**

This course is designed for students who have studied an instrument, are currently studying an instrument, or who are current members of the band or chorus. The focus of the course is on the understanding and use of music notation in the analysis of music. Students will analyze music aurally (by ear) and visually through music notation. Students should have a basic understanding of how to read music notation prior to enrolling in this course.

### **MUSIC THEORY II (Half year course - .50 credit)**

This course is a continuation of Music Theory I. It is designed for students who have studied an instrument, are currently studying an instrument, or who are current members of the band or chorus. The focus of the course is on the understanding and use of music notation in the analysis of music. Students should have a firm grasp in the understanding of basic music notation prior to taking this course. Students will continue their study of the analysis of music aurally and

through music notation. Students will also explore composition, and study the basic skills necessary to create their own musical compositions.

Pre-requisite: Music Theory I or teacher approval

### **MUSIC and MOVEMENT (Half year course - .50 credit)**

This course focuses on traditional dance music, figures and choreography. Students will participate in traditional group dances such as Square Dance, Contra-Dance, and Sicilian Circles. They will study the traditional instruments, musical forms used in traditional dance music. Students will learn how to choreograph a simple dance, and how to call their dance for the class. At the end of the semester, students will perform in either the Winter (1st Semester) or the Spring Concert (2nd Semester). This course may be taken more than once for credit.

### **MUSIC TECHNOLOGY (Half year course - .50 credit)**

This course is designed to introduce the students to the world of digital audio and computer recording. By using the tools of digital recording, the students will be able to create their own musical compositions and arrangements to produce their own audio CD archives to use for listening, websites, video, or any other application where music is used.

### **PIANO (Half year course - .50 credit)**

In this course students will learn how to read and write music notation through the study of the piano. Students will learn basic piano keyboard and music theory skills.

This course may be taken more than once for credit. Students will continue to learn new skills and repertoire as they work independently and at their own pace with teacher guidance.

### **MUSIC IN OUR WORLD (Half year course - .50 credit)**

This is a music appreciation course designed for students with little or no prior music background. The focus of this class will be on understanding and analyzing musical styles, and categorizing musical instruments from various cultures around the world.

### **MUSIC IN FILM AND BROADWAY (Half year course - .50 credit)**

This is a music appreciation course designed for students with little or no prior music background. The focus of this class will be on understanding and analyzing the use of music in telling the story and in heightening the emotional impact of storylines in movies, musical theater, and opera.

### **MUSIC IN OUR LIVES (Half year course - .50 credit)**

This is a music appreciation course designed for students with little or no prior music background. The focus of this class will be on understanding and analyzing the role that music plays in various important parts of our lives, and its functional role in society and culture.

## **LIFE SKILLS**

### **LEARNING SUPPORT MATH (Full year course – 1 credit)**

This course teaches students basic math concepts and how they relate to real life situations. It allows students to practice every day math skills with concepts like balancing a checkbook, calculating hourly, weekly and overtime pay. It also allows students to practice math concepts seen in extracurricular activities like measuring for cooking, home repairs, and woodworking.

### **LEARNING SUPPORT ENGLISH (Full year course – 1 credit)**

Learning Support English develops language skills that we use in everyday life. It breaks down a sentence and teaches and describes the basic parts of speech and their uses. This class also focuses on basic reading skills, such as phonics, sight word identification, spelling, and introduction to literature.

### **LEARNING SUPPORT SOCIAL SKILLS/DAILY LIVING SKILLS (Full year course – 1 credit)**

This course is designed to teach students how to use manners, express feelings, and act as a responsible, kind, and helpful adult. The course focuses on how to initiate appropriate conversations and how to respond to others in several different circumstances. Ways of treating others and yourself in a positive manner and self-esteem builders are also emphasized. This course will also focus on daily living skills. It will prepare students for everyday activities such as shopping, budgeting, eating in restaurants, cooking and more

### **LEARNING SUPPORT SCIENCE (Full year course – 1 credit)**

This course will teach students about the world around them. The goal of this course is to provide a well-grounded understanding of selected concepts in physical science while at the same time developing thinking skills that enable and encourage independent thinking. It will focus on many components such as the environment, animals, machines, sound and light, electricity, motion and more.

### **LEARNING SUPPORT HISTORY (Full year course – 1 credit)**

This course is adapted from the general education curriculum. This course offers the same concepts that are found in the general education curriculum, but modified to fit each student's educational need.

## **SUPPORT SERVICES MATH**

### **GUIDED MATH FOR LIFE (Full year course – 1 credit)**

This course will require students to use basic mathematical computation skills and learn how to apply these skills as a wise consumer in real world situations. This course reinforces and extends the students' mastery of basic mathematical concepts. The skills taught in this course will be individualized to the students' educational needs.

### **GUIDED PRE-ALGEBRA (Full year course – 1 credit)**

Pre-Algebra prepares for Algebra. Pre-Algebra includes several broad topics including new types of numbers such as integers, fractions, decimals, and negatives. It also introduces factorization, associative and distributive properties, along with powers, roots, and order of operations. Pre-Algebra begins preparing for evaluation of expressions and understanding of variables.

### **GUIDED ALGEBRA 1 (Full year course – 1 credit)**

Algebra 1 covers all topics in a first-year algebra course, from proofs, statistics and probability to algebra-based real-world problems. With Algebra 1, students begin developing the more complex and understanding required for advanced mathematics.

### **GUIDED GEOMETRY (Full year course – 1 credit)**

Geometry includes formulas for lengths, areas, volumes, and degrees to determine information for geometric shapes and figures. This includes finding circumference and area of circles, lengths of sides, area of space and degrees of angles. Formulas are introduced and used in each area of geometry to find the necessary information for those shapes and figures.

### **GUIDED ALGEBRA 2 (Full year course – 1 credit)**

Algebra 2 extends on the solution of linear equations from Algebra and focuses on solutions of quadratic equations. Skills such as factoring, completing squares, using formulas and graphing are involved in Algebra 2, along with the use of complex numbers and relations to graphs.

## **SUPPORT SERVICES SCIENCE**

### **GUIDED SCIENCE (Full year course – 1 credit)**

This course is designed to teach students the concepts of Physical Science. Students learn through reading and by completing experiments in this class. Students focus upon four key elements of science in this class, sounds, machines, electricity, and energy.

## **SUPPORT SERVICES ENGLISH**

### **Guided English 9 (Full year course - 1 credit)**

The main goal of this course is to develop knowledge of literature that will help students appreciate various genres written by American authors. Students will learn many literary terms and a vast vocabulary related to the context of the pieces they read in class. Stories read in this class will be modified to meet the needs of the students in the class. Students will also work on their writing skills. This is a ninth-grade class.

### **Guided English 10 (Full year course - 1 credit)**

This course will focus on the Read 180 curriculum, which is an intense, comprehensive reading intervention program used to increase students' reading levels. Each student receives instruction that is individually designed for their current reading level and writing skills. The program consists of whole and small group direct instruction, independent reading, writing practice, and computer-based individualized instruction.

### **Guided English 11 (Full year course - 1 credit)**

This course will explore various novels, analyzing them in order to build stronger comprehension through classwork and discussion. In addition, students will be introduced to and apply the steps needed to create a research paper and improve their formal writing.

### **Guided Career English 12 (Full year course - 1 credit)**

Career English 12 is made up of several components that will prepare students for the real world. Some topics that will be covered are job search, consumer spending, job etiquette, living independently and managing money. Students will cover several higher order comprehension skills and essential math skills needed in the real world, as well in order to prepare them for postsecondary living. In addition, they will spend time preparing for their senior project presentation and portfolio.

### **Guided Phase IV English (Full year course – 1 credit)**

Guided Phase IV English is a literature course that focuses on improving fluency, comprehension, grammar and written expression. Students are responsible for reading material of various genres that promotes higher level thinking, while meeting the needs of each individual student. Vocabulary, spelling, paragraph construction and grammar concepts are strong components of this course.