

# Mid-Prairie Virtual Academy Course Catalog



## Graduation Requirements

Specific curricular area standards are listed below and include both state and local course requirements. A regular full year course will be completed in 18 weeks with block scheduling and will equate to 1.0 unit credit. There are classes that will be completed in 9 weeks, which will equate to 0.5 unit of credit or 1 semester credit. One unit of credit is equivalent to two semester credits. The number of credits required to graduate from the Mid-Prairie Virtual Academy is 28 units or 56 semester credits.

The Mid-Prairie Virtual Academy graduation requirements are listed below. If you are looking to return and graduate from the Mid-Prairie High School please consult their Program of Studies Handbook.

## Graduation Requirements

### English Requirement 4 units

- English 9 – 1.0 unit
- English 10 – 1.0 unit
- English 11 - 1.0 unit
- At least 1.0 in elective courses

### Science Requirements – 3 units

- Biology - 1.0 unit
- Earth & Space Science 1.0 unit
- At least 1.0 in Science Electives

### Social Studies Requirements – 3 units

- U.S. History 1.0 unit
- U.S. Government .5 unit
- At least 1.5 in Social Studies Electives

### Math Requirements – 3 units

- Algebra 1 - 1.0 unit
- Geometry A - 0.5 unit
- At least 1.5 units in Math Electives

### Life Skills Requirements - 1 unit

- Family Living & Healthy Relationships - .5 unit
- Personal Finance - .5 unit

Physical Education – .5 unit is required each school year / 2.0 units total

The responsibility of meeting the graduation requirements lies with the student

### English Electives

- English 12 - 1.0 unit
- Creative Writing - .5 unit
- Public Speaking - .5 unit
- Gothic Literature - .5 unit
- Mythology & Folklore - .5 unit
- Structure of Writing - .5 unit

### Science Electives

- Physical Science - 1.0 unit
- Integrated Physics & Chemistry - 1.0 unit
- Chemistry - 1.0 unit
- Physics - 1.0 unit

### Social Studies Electives

- World Geography 1.0 unit
- Economics .5 unit
- Sociology 1: .5 unit
- Law & Order .5 unit
- World History 1.0 unit
- Psychology 1.0 unit

### Math Electives

- Algebra 2 - 1.0 unit
- Geometry B - 0.5 unit
- Consumer Mathematics - 1.0 unit
- Financial Mathematics - 1.0 unit
- Precalculus - 1.0 unit
- Probability & Statistics - 1.0 unit

# Math

## Graduation Requirements

3 credits of Math

- ★ Algebra 1 - 1.0 unit
  - ★ Geometry A - 0.5 unit
  - ★ At least 1.5 units in Math Electives
- \* Optimum preparation for UNI, ISU, U of I, other 4 yr. Colleges is 4 years of math.
- \* U of I College of Engineering 4 years.

### Math Algebra 1 A/B - 1 Credit

Algebra 1 v7.0 offers 100% alignment to the Common Core State Standards for Mathematics. The lessons, offer focused exploration of topics to make concepts more digestible for students. Practice questions are included with each lesson, including technology-enhanced items and explanations to assist students in their understanding of the concepts. New features to support student mastery include worksheets for practice and guided notes to help students record key takeaways as they move through the tutorial. The course is also built around student engagement, with more interactive lessons and videos that work through examples and model problem-solving skills.

### Algebra 2 A/B - 1 Credit

Algebra 2 v7.0 offers 100% alignment to the Common Core State Standards for Mathematics. Practice questions are included with each lesson, including technology-enhanced items and explanations to assist learners in their understanding of the concepts. Features to support student mastery include worksheets for practice and guided notes to help learners record key takeaways as they move through the tutorial. The course is built around learner engagement, with more interactive lessons, videos that work through examples and model problem-solving skills, and experiences to support multi-modal learning and sense-making. Scaffolding pieces are included throughout the course to provide learners with opportunities to build on foundational skills as well as prepare for greater success by drawing learners' attention to common misunderstandings and articulating the big ideas that underpin learning.

### Consumer Mathematics - .5 Credit

This course explains how four basic mathematical operations – addition, subtraction, multiplication, and division – can be used to solve real-life problems. It addresses practical applications for math, such as wages, taxes, money management, and interest and credit. Projects

for the Real World activities are included that promote cross-curricular learning and higher-order thinking and problem-solving skills.

### [Financial Mathematics A/B - 1 Credit](#)

Financial Algebra is designed to instruct students in algebraic thinking while also preparing them to navigate a number of financial applications. Students will explore how algebraic knowledge is connected to many financial situations, including investing, using credit, paying taxes, and shopping for insurance. In studying these topics, students will learn about the linear, exponential, and quadratic relationships that apply to financial applications. In addition, the course will help prepare students to tackle the wide variety of financial decisions they will face in life, from setting up their first budget to planning for retirement.

### [Geometry A/B - 1 Credit](#)

A comprehensive examination of geometric concepts, each lesson provides thorough explanations and builds on prior lessons. Step-by-step instruction and multiple opportunities for self-check practice develop skills and confidence in students as they progress through the course. The course features animations, which allow students to manipulate angles or create shapes, such as triangles, engage students in learning and enhance mastery. Labs extend comprehension by giving students hand-on experiences.

### [Precalculus A/B - 1 Credit](#)

Precalculus builds on algebraic concepts to prepare students for calculus. The course begins with a review of basic algebraic concepts and moves into operations with functions, where students manipulate functions and their graphs. Precalculus also provides a detailed look at trigonometric functions, their graphs, the trigonometric identities, and the unit circle. Finally, students are introduced to polar coordinates, parametric equations, and limits.

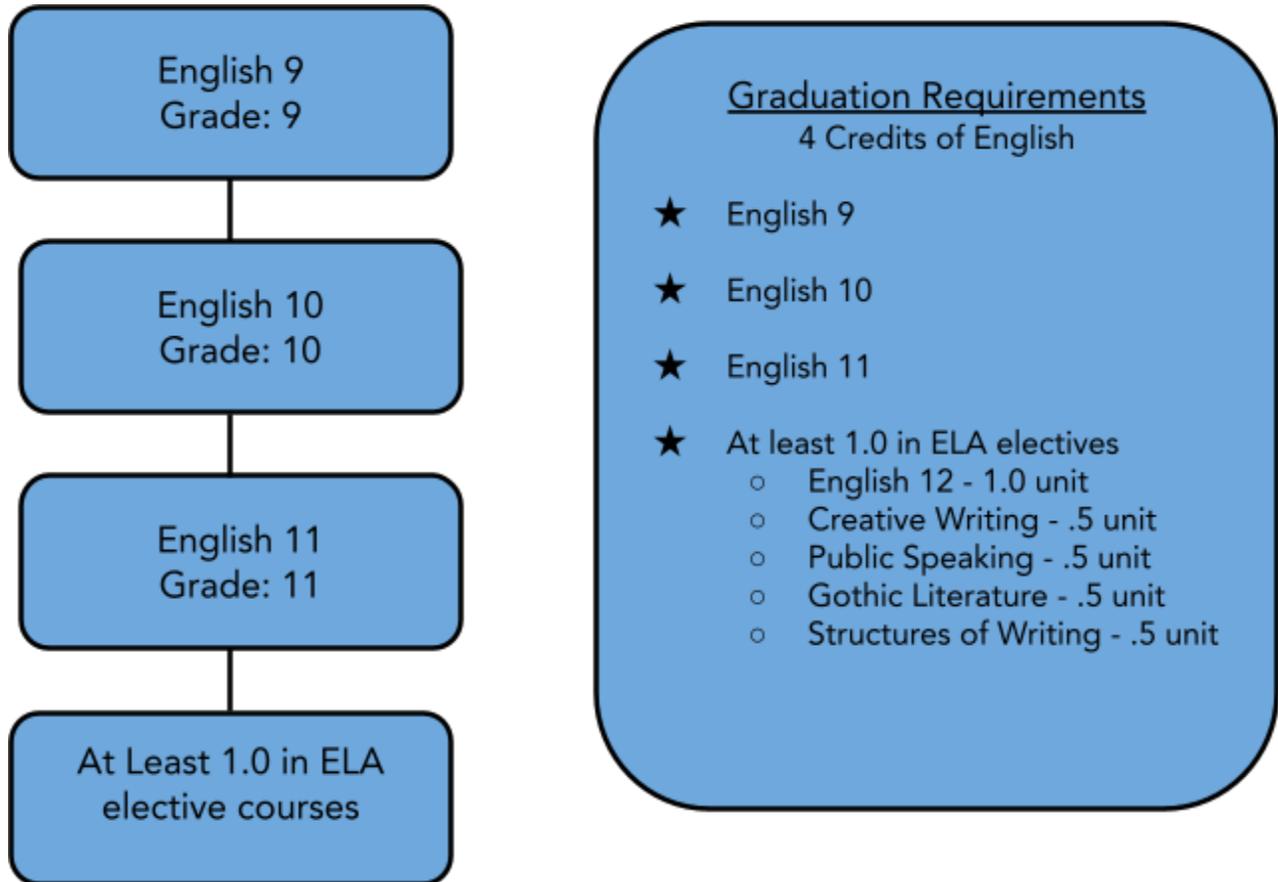
### [Probability & Statistics - .5 Credit](#)

This course is designed for students in grades 11 and 12 who may not have attained a deep and integrated understanding of the topics in earlier grades. Students acquire a comprehensive understanding of how to represent and interpret data; how to relate data sets; independent and conditional probability; applying probability; making relevant inferences and conclusions; and how to use probability to make decisions.

### [Advanced Calculus A/B - 1 Credit](#)

This course grounds the study of calculus in real-world scenarios and integrates it with the four STEM disciplines. The first semester covers functions, limits, derivatives and the application of derivatives. The course goes on to cover differentiation and antidifferentiation, applications of integration, inverse functions, and techniques of integration.

## English Language Arts



### English 09 A/B - 1 Credit

English 9 v6.0 is 100% aligned to the Common Core State Standards for English Language Arts. A balance of fiction and nonfiction texts are used throughout the course, and each unit is designed around a thematic concept to provide cohesiveness to the skills based lessons and activities that make up the unit. The course intertwines the development of reading skills with the development of writing, speaking and listening, and language skills. Students can look forward to a course where the information is delivered in easy-to-digest chunks using student-friendly language, with assessments that are tightly aligned to the concepts and skills learned in the lesson. The course design reflects educator feedback about student engagement by featuring a variety of interactions, videos, and new student resources, such as worksheets and guided notes. Educators were also involved with writing activities and worksheets for this course.

### English 10 A/B - 1 Credit

This course focuses on using personal experiences, opinions, and interests as a foundation for developing effective writing skills. Skills acquired in English I are reinforced and refined. Literary models demonstrate paragraph unity and more sophisticated word choice. A research paper is

required for completion of course. Topics include grammar, sentence and paragraph structure, organizing compositions, and the research paper.

### English 11 A/B - 1 Credit

English 11A explores the relation between American history and literature from the colonial period through the realism and naturalism eras. English 11B explores the relation between American history and literature from the modernist period through the contemporary era, and presents learners with relevant cultural and political history. Readings are scaffolded with pre-reading information, interactions, and activities to actively engage learners in the content. The lessons in both semesters focus on developing grammar, vocabulary, speech, and writing skills.

### English 12 A/B - 1 Credit

In keeping with the model established in English 11, these courses emphasize the study of literature in the context of specific historical periods, beginning with the Anglo-Saxon and medieval periods in Britain. Each lesson includes tutorials and embedded lesson activities that provide for a more engaging and effective learning experience. Semester B covers the romantic, Victorian, and modern eras. End of unit tests ensure mastery of the concepts taught in each unit, and exemptive pretests allow students to focus on content that they have yet to master.

### Mythology & Folklore - .5 Credit

Introduction to Mythology and Folklore is a one-semester course with 15 lessons that discuss myths, legends, and folklore from around the world. This course covers subjects such as Mythology, Legend, Folklore, Gods and the Goddesses, natural events, and wonders of the world.

### Gothic Literature - .5 Credit

Gothic Literature is a one-semester course with 14 lessons that analyze the conventions, elements, themes, and other characteristics of Gothic literature. This course covers subject areas such as: morality and spirituality in gothic poetry, Dr. Jekyll and Mr. Hyde, dual personalities, Edgar Allan Poe, Dracula, gothic conventions across time, and many more.

### Creative Writing - .5 Credit

This course is designed to get students to pursue creative writing as a vocation or as a hobby. To that purpose, it exposes them to different genres and techniques of creative writing, as also the key elements (such as plot and characterization in fiction) in each genre. Great creative writing does not come merely by reading about the craft—one also needs ideas; a process for planning, drafting and revising; and the opportunity to experiment with different forms and genres. The lesson tutorials in this course familiarize students with the basic structure and elements of different types or genres of writing. The course is based on Career and Technical Education (CTE) standards designed to help students prepare for entry into a wide range of careers in creative writing fields.

### Structure of Writing - .5 Credit

This semester-long course focuses on building good sentences. Students will learn how to put words, phrases, and clauses together and how to punctuate correctly. They will start using sentences in short compositions. As an extra bonus, students will add some new words to their vocabulary, and they will practice spelling difficult words. Near the end of the course, students are to submit a book report. Early in the course, encourage students to start looking for the books they want to read for the book report. They might also preview the introduction to that lesson so they know what will be expected.

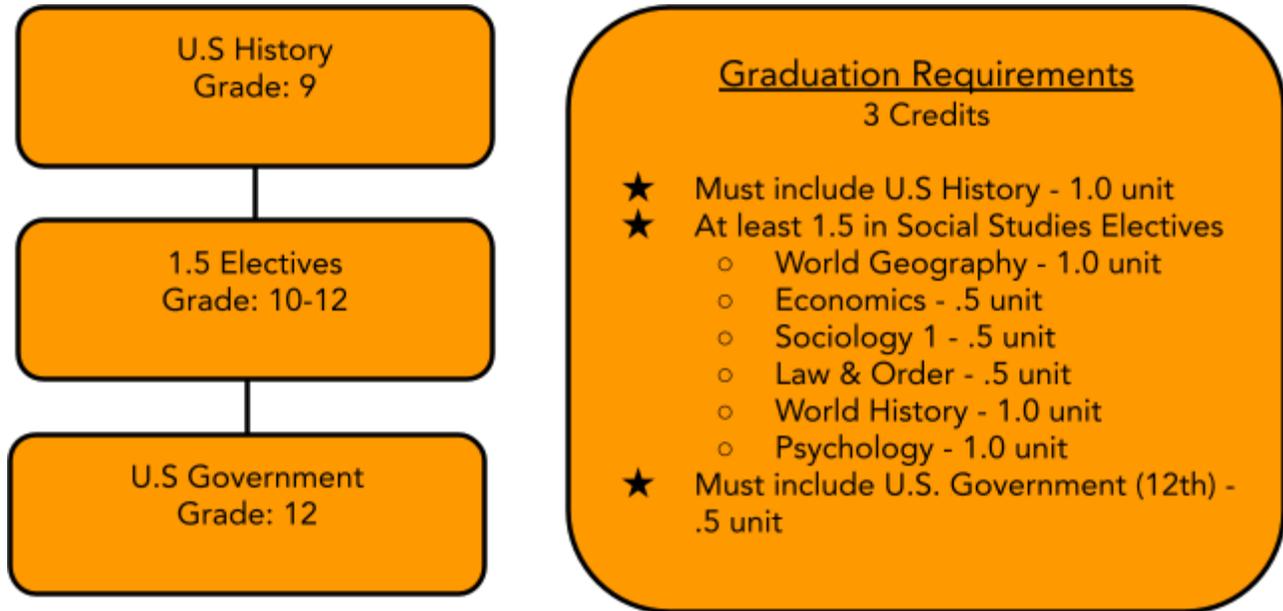
### Public Speaking - .5 Credit

The art of public speaking is one which underpins the very foundations of Western society. This course examines those foundations in both Aristotle and Cicero's views of rhetoric, and then traces those foundations into the modern world. Students will learn not just the theory, but also the practice of effective public speaking, including how to analyze the speeches of others, build a strong argument, and speak with confidence and flair. By the end of this course, students will know exactly what makes a truly successful speech and will be able to put that knowledge to practical use.

### Advanced English Lit & Comp A/B - 1 Credit

Each unit of Advanced English Literature and Composition is based on a researched scope and sequence that covers the essential concepts of literature at an AP level. Students engage in in-depth analysis of literary works in order to provide both depth and breadth of coverage of the readings. Units include Close Analysis and Interpretation of Fiction, Short Fiction, the Novel, and Poetic Form and Content. Writing activities reinforce the reading activities and include writing arguments, analysis, interpretation, evaluation, and college application essays.

## Social Studies



### [U.S. Government - .5 Credit - Senior Year Class](#)

The interactive, problem-centered, and inquiry-based units in U.S. Government emphasize the acquisition, mastery, and processing of information. Units include study of the foundations of American government and the American political culture, with units 2 and 3 covering the U.S. constitution, including its roots in Greek and English law, and the various institutions that impact American politics.

### [U.S. History A/B - 1 Credit](#)

This course not only introduces students to early U.S. History, but it also provides them with an essential understanding of how to read, understand, and interpret history. For example, the first unit, The Historical Process, teaches reading and writing about history; gathering and interpreting historical sources; and analyzing historical information. While covering historical events from the founding events and principles of the United States through contemporary events, the course also promotes a cross-disciplinary understanding that promotes a holistic perspective of U.S. History.

### [World Geography A/B - 1 Credit](#)

In an increasingly interconnected world, equipping students to develop a better understanding of our global neighbors is critical to ensuring that they are college and career ready. These semester-long courses empower students to increase their knowledge of the world in which they live and how its diverse geographies shape the international community. Semester A units begin with an overview of the physical world and the tools necessary to exploring it effectively.

Subsequent units survey each continent and its physical characteristics and engage students and encourage them to develop a global perspective.

### Economics - .5 Credit

This course covers basic economic problems such as scarcity, choice, and effective use of resources. It also covers topics on a larger scale such as market structures and international trade. It particularly focuses on the US economy and analyzes the role of the government and the Federal Reserve System.

### World History A/B - 1 Credit

In World History, learners will explore historical world events with the help of innovative videos, timelines, and interactive maps and images. Learners will develop historical thinking skills and apply them to their study of European exploration, the Renaissance the Reformation, and major world revolutions. They will also study World War I, World War II, the Cold War, and the benefits and challenges of living in the modern world.

### Psychology A/B - 1 Credit

This flexible, customizable course gives your students an overview of the history of psychology while also giving them the resources to explore career opportunities in the field. Students will learn how psychologists develop and validate theories and will examine how hereditary, social, and cultural factors help form an individual's behavior and attitudes. Students will also evaluate the effectiveness of different types of psychological counseling and therapy. Highly interactive content includes online discussions that help develop critical thinking skills.

### Sociology - .5 Credit

In this course, students will explore the evolution of sociology as a distinct discipline while learning about sociological concepts and processes. They will learn how the individual relates to and impacts society. Students will also learn about the influence of culture, social structure, socialization, and social change on themselves and others. The course combines a variety of content types, including lessons, activities, discussions, and games to engage learners as they discover sociology as a subject and as a career.

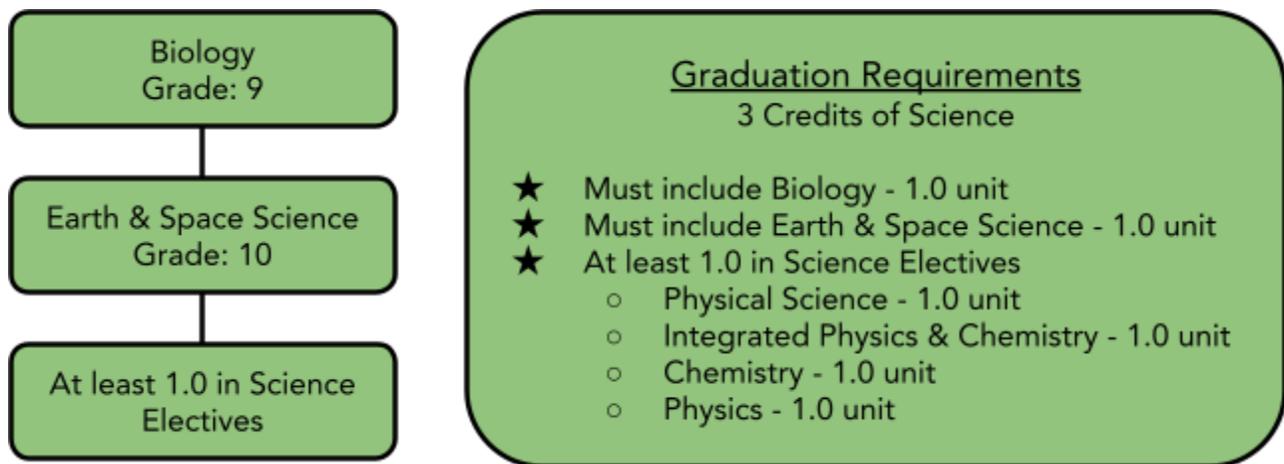
### Law & Order: Introduction to Legal Studies - .5 Credit

From traffic laws to regulations on how the government operates, laws help provide society with order and structure. Our lives are guided and regulated by our society's legal expectations. Consumer laws help protect us from faulty goods; criminal laws help to protect society from individuals who harm others; and family law handles the arrangements and issues that arise in areas like divorce and child custody. This course focuses on the creation and application of laws in various areas of society.

## Advanced U.S. History A/B - 1 Credit

This course develops critical thinking skills by encouraging multiple views as students realized that there are often multiple accounts of a single historical event that may not be entirely consistent. Electronic discussion groups encourage collaboration, and a variety of practice activities are provided, from multiple choice actions to advanced interactions. Units include: The Historical Process; Early America; Revolutionary America; The Civil War; Populism and Progressivism; the emergence of the U.S. as a world power; and contemporary themes.

## Science



## Biology A/B - 1 Credit

This inquiry- and lab-based course is designed to support modern science curriculum and teaching practices. It robustly meets NGSS learning standards for high school biology. Content topics include cells, organ systems, heredity, organization of organisms, evolution, energy use in organisms, and the interdependence of ecosystems. Each lesson includes one or more inquiry-based activities that can be performed online within the context of the lesson. In addition, the course includes a significant number of hands-on lab activities. Approximately 40% of student time in this course is devoted to true lab experiences. Lab materials note: Most hands-on labs employ relatively-common household materials. A few labs require specialized scientific equipment or materials, such as a microscope, slides, or biological samples. These few specialized labs are optional but provide valuable laboratory experience. Single-student Edmentum Lab Kits may be purchased from Ward's Science. Please refer to the Student Syllabus or Teacher's Guide for details on lab materials.

## Chemistry A/B - 1 Credit

This inquiry- and lab-based course is designed to support modern science curriculum and teaching practices. It robustly meets NGSS learning standards associated with high school

chemistry along with additional concepts and standards typically included in a full-year high school chemistry course. Content topics include atoms and elements, chemical bonding, chemical reactions, quantitative chemistry, molecular-level forces, solutions, and energy and changes in matter. It also addresses additional concepts and standards typically included in a full-year high school chemistry course, including molar concentrations, acid base reactions, advanced stoichiometry, gas laws, and organic compounds. Each lesson includes one or more inquiry-based activities that can be performed online within the context of the lesson. In addition, the course includes a significant number of hands-on lab activities. Approximately 40% of student time in this course is devoted to true lab experiences, as defined by the National Research Council (2006, p. 3). Lab materials note: Most hands-on labs employ relatively-common household materials. A few labs require specialized scientific equipment or materials, such as an electronic balance (0.01g), graduated cylinders, test tubes, and chemical reagents. These few specialized labs are optional but provide valuable laboratory experience. Single-student Edmentum Lab Kits may be purchased from Ward's Science. Please refer to the Student Syllabus or Teacher's Guide for details on lab materials.

### [High School Earth and Space Science A/B - 1 Credit](#)

This inquiry- and lab-based course is designed to support modern science curriculum and teaching practices. It robustly meets NGSS learning standards associated with high school Earth and space science. Content topics include scientific processes and methods, the universe, the Precambrian Earth, the Earth's materials and tectonics, the hydrosphere and atmosphere, and human interactions with the Earth's systems and resources. Each lesson includes one or more inquiry-based activities that can be performed online within the context of the lesson. In addition, the course includes a significant number of hands-on lab activities. Approximately 40% of student time in this course is devoted to true lab experiences. Lab materials note: Most hands-on labs employ relatively-common household materials. A few labs require specialized scientific equipment or materials, such as an electronic balance (0.01g), graduated cylinders, and a water testing kit. These few specialized labs are optional but provide valuable laboratory experience. Single-student Edmentum Lab Kits may be purchased from Ward's Science. Please refer to the Student Syllabus or Teacher's Guide for details on lab materials.

### [Physics A/B - 1 Credit](#)

Physics introduces students to the physics of motion, properties of matter, force, heat, vector, light, and sound. Students learn the history of physics from the discoveries of Galileo and Newton to those of contemporary physicists. The course focuses more on explanation than calculation and prepares students for introductory quantitative physics at the college level. Additional areas of discussion include gases and liquids, atoms, electricity, magnetism, and nuclear physics. Lab materials note: None of the virtual labs require specialized laboratory materials or tools. Some virtual labs do allow students to make use of common, household items—such as paper and a pencil—if they choose.

## Physical Science A/B - 1 Credit

In Physical Science, you'll describe the atomic and molecular structure of substances using models. You will investigate how chemical reactions involve energy and lead to changes in properties of substances. You'll also model different kinds of forces and the effect they have on the motion of objects. You'll solve problems involving work and power and apply these principles to simple machines. You will see how simple machines make up more complex machines that are important in our lives. In Part B you'll investigate gravitational, electric, and magnetic force fields and identify factors that determine their strength. You'll apply concepts of electricity and magnetism to explain how motors, generators, and electromagnets work. You will discuss energy transformations in objects and systems, including how heat flows between objects that are at different temperatures. You will model how sound and light travel as waves and how they interact with different forms of matter. Finally, you'll explore how electromagnetic waves help us communicate with one another and collect information about the universe.

## Advanced Chemistry A/B - 1 Credit

Advanced Chemistry includes most of the 22 laboratory experiments recommended by the College Board to provide a complete advanced experience in a blended environment. More than 25 percent of the online lesson modules are inquiry-based and employ online simulations, data-based analysis, online data-based tools, and —kitchen sink labs that require no specialized equipment or supervision. Many of the lessons include significant practice in stoichiometry and other critical, advanced chemistry skills.

## Advanced Biology A/B - 1 Credit

To generate skills for lifelong learning, 25 percent of the lessons in Advanced Biology use student-driven, constructivist approaches for concept development. The remaining lessons employ direct-instruction approaches. In both cases, the lessons incorporate multimedia-rich, interactive resources to make learning an engaging experience. The AP approach to advanced biology topics helps students achieve mastery of abstract concepts and their application in everyday life and in STEM-related professions.

## Introduction to Marine Biology - .5 Credit

This course is designed to introduce students to oceanic features and processes, ocean habitats and ecosystems, life forms in the ocean, and different types of interactions in the ocean. Students will learn about the formation and characteristic features of the oceans. They will learn about the scientific method and explore careers available in marine biology. They will learn about the characteristic features of different taxonomic groups found in the ocean. They will learn about the different habitats, life forms, and ecosystems that exist in the oceans and explore the different types of adaptations marine creatures possess to survive in the ocean. They will learn about succession and the flow of energy in marine ecosystems. They will also learn about the resources that the oceans provide and the threats that the oceans face from human activities.

## Career & Technical Education

### [Accounting A/B - 1 Credit](#)

The Bureau of Labor Statistics identifies accounting as one of the best careers for job growth in the next decade. This course empowers high school students with the essential skills they need to understand accounting basics. Lessons include Account Types (assets, liabilities, expenses, etc.), Fundamentals of Bookkeeping, Financial Statements, and Careers in Accounting. Engaging and relevant, this course particularly helps both those students with an accounting career orientation, and those in need of an overview of essential accounting principles.

### [Child Development & Parenting A/B - 1 Credit](#)

As adulthood and its accompanying responsibilities become closer for many of your students, this one-semester course with 12 lessons introduces them to the basics of parenting. Students will learn the nuances of parenting including learning about prenatal and postnatal care and gain insights on the nurture of children. Students will also learn about the importance of positive parenting skills, parent-child communication, and ways to use community resources for effective parenting. Activities will help your students connect leading research to real-life experience.

### [Computer Programming 1 A/B - 1 Credit](#)

Part of the Courseware Career and Technical Education (CTE) Library, Computer Programming combines engaging online and offline activities in a rigorous one-semester course for your high school students who may be aspiring to technical careers. Building on lessons covering the software development lifecycle and software development methodologies, the course uses online discussions, activities, and lessons to lead your students through additional key topics such as quality control, system implementation, and maintenance and the increasingly important issue of system security.

### [Entrepreneurship A/B - 1 Credit](#)

This course is based on Career Technical Education (CTE) standards designed to help students understand the roles and attributes of an entrepreneur, marketing and its components, selling process, and operations management. This course discusses entrepreneurship and the economy, marketing fundamentals, managing customers, production and operations management, money, and business law and taxation.

## [Graphic Design & Illustration A/B - 1 Credit](#)

This course will help students develop an understanding of the industry with a focus on topics such as history of graphic design, types of digital images, graphic design tools, storing and manipulating images, design elements and principles, copyright laws, and printing images. The course is based on Career Technical Education (CTE) standards designed to help students develop technical knowledge and skills needed for success in the graphic design industry.

## [Introduction to Finance - .5 Credit](#)

This course is designed to enable students at high school level to develop financial skills that they can use during in their careers in business organizations. Financial literacy is an increasingly essential capability as students prepare for the workforce, and this 18-lesson course provides the information they need to determine if a career in finance is right for them. The course uses games and online discussions to effectively facilitate learning, while introducing your learners to a variety of topics, including investment strategies, money management, asset valuation, and personal finance. The course is based on Career Technical Education (CTE) standards designed to help students develop technical knowledge and skills needed for success in the finance industry.

## [Principles of Agriculture, Food, & Natural Resources A/B - 1 Credit](#)

Throughout this course, your students will learn about various career options in the agriculture, food, and natural resources industries. They will learn about technology, safety, and regulatory issues in agricultural science. They will also learn about some topics related to agriculture, such as international agriculture and world trade, sustainability, environmental management, research, development, and future trends in the industry. The course helps students navigate the rising demand for sustainable food sources while also meeting the challenge of producing higher yields to feed a growing world.

## [Professional Photography A/B - 1 Credit](#)

Few recent technical innovations have changed an industry as fundamentally as digital photography has changed everything about the way we capture our lives in the way we take, edit, store, and share pictures. Digital Photography provides you with the flexibility to not only use it as an independent individual course or as a group or class course, but to also easily customize the course to the unique needs of your situation. The course combines 15 lessons with online discussions that promote the development of critical thinking skills as your students explore digital photography as an enriching activity or a career.

## [Web Technologies A/B - 1 Credit](#)

Whether they know it or not, almost all of your students have an interest in web design. This course takes them inside the essentials of web design and helps them discover what makes a site truly engaging and interactive. Lessons such as Elements of Design, Effects of Color, and Typography help them understand the elements of effective and dynamic web design. The course

covers the basics of HTML, CSS, and how to organize content, and helps to prepare them for a career in web design.

### Career Explorations - .5 Credit

The 21 lessons and additional activities in this one-semester course are fundamental to ensuring career readiness on the part of your students. Covering such essentials as developing and practicing a strong work ethic, time management, communication, teamwork, and the fundamentals of workplace organizations, Career Explorations develops not just essential skills, but the confidence in themselves and their abilities to present themselves that your students need as they prepare to embark on their chosen careers.

### Game Development - .5 Credit

Are any of your students gamers? That's what we thought. In this course, they'll learn the ins and outs of game development to prepare them for a career in the field. Whether it is the history of video games, character development, mobile game design, user interface design, social gaming, or the principles of development design and methodologies, this 20-lesson course covers it all. As you might guess, games are included in the course to enhance the learning experience and help assess student progress. While fun and highly engaging, the course focuses on laying a strong foundation for a career in game development.

### Health Science 1 A/B - 1 Credit

The course is based on Career and Technical Education (CTE) standards to help students develop technical knowledge and skills needed for success in the health science industry. Semester A is designed to enable all students at the high-school level to understand the basic structure and function of the human body and it will help the students identify and analyze the diseases and medical procedures related to each body system. Semester B will help the students develop an understanding of biomolecules such as proteins, carbohydrates, and lipids; biological and chemical processes; and various diseases that affect the body.

### Introduction to Android Mobile App Development - .5 Credit

This course is designed to introduce students to the process involved in creating a mobile app. Students learn about history of and upcoming trends in mobile app development. They explore career options in mobile app development and describe skills and training required for mobile app development. They also describe the types of apps available in the market. Moreover, they learn about platforms for developing Android mobile apps. Further, they learn about the Android development environment. Finally, they create the user interface of an app and make it interactive in Android Studio.

### Introduction to Cybersecurity - .5 Credit

This Elective course introduces students to the field of cybersecurity, focusing primarily on personal computer use and vulnerabilities while also highlighting the wider scope of cybersecurity

from a societal and career perspective. Specific topics include computer security, VPN and wireless security, risk management, and laws, standards, and ethics related to cybersecurity.

### [Introduction to iOS Mobile App Development - .5 Credit](#)

This course is designed to introduce students to the process involved in creating an app. Students learn about history of and upcoming trends in mobile app development. They explore career options in mobile app development and describe skills and training required for mobile app development. They also describe the types of apps available in the market. Moreover, they learn about various platforms for developing iOS mobile apps. Further, they learn about the iOS development environment. Finally, they create the user interface of an app and make it interactive in Xcode.

### [Principles of Engineering & Technology A/B - 1 Credit](#)

This easy-to-manage course provides students with essential STEM knowledge and an effective overview of STEM careers. The course's 15 lessons are interspersed with activities and online discussions that engage learners and promote understanding and achievement. Topics covered include biotechnology, mechanics, and fluid and thermal systems. The concluding lesson provides a valuable overview of the overall engineering design process.

### [Robotics I A/B - 1 Credit](#)

This two-semester course is focused on the concepts related to robots and how to construct a robot. Students will learn about the history and applications of robotics. Students will learn about the job opportunities and employability skills in the field of robotics. Students will also learn about the basic concepts of six simple machines, electricity, electronic circuits, Boolean algebra, magnetism, and their applicability to robotics. Students will apply safety procedures and construct a simple robot. Students will also learn about project management and engineering design process. Students will learn about the programming languages used in robotics. Students will create a simple robotic arm. Students will also construct a robot using programming. Student will learn about ethics and laws related to robotics. Students will also learn how to test and maintain a robot. Online discussions and unit activities require students to develop and apply critical thinking skills, while the included games appeal to a variety of learning styles and keep students engaged. Required lab materials note: This course contains hands-on labs that employ relatively-common household materials to provide a valuable laboratory experience. Please refer to the Student Syllabus or Teacher's Guide for a detailed list of required lab materials and options for purchasing kits.

### [Sports & Entertainment Marketing - .5 Credit](#)

This course is designed to enable all students at the high school level to develop skills they will need to be successful in sports, entertainment, and recreational marketing professions. Students learn about the structure of a business firm and financial statements. Students also learn about the basics of sports, entertainment, and recreation marketing. Finally, students explore essential

career skills, such as teamwork and time management. This course covers topics such as marketing staples, mapping markets, marketing communication, and making the sale. The course is based on Career Technical Education (CTE) standards designed to help students prepare for entry into a wide range of careers in sports, entertainment, and recreational marketing field.

### [Biotechnology: Unlocking Nature's Secrets - .5 Credit](#)

In today's world, biotechnology helps us grow food, fight diseases, and create alternative fuels. In this course, students will explore the science behind biotechnology and how this science is being used to solve medical and environmental problems.

### [Advanced Computer Science A - .5 Credit](#)

This course is designed to introduce students to the basic concepts of computer programming. Students learn how to compile and run a Java program. They learn to use arithmetic, relational, and logical operators. They learn to use different decision-making and loop statements. They learn to create classes, methods, String objects, and an ArrayList object. They learn to perform sequential search, binary search, selection sort, and insertion sort on an array. They learn to implement object-oriented programming design. They learn to implement inheritance, polymorphism, and abstraction. Further, they describe privacy and legality in the context of computing.

### [Medical Terminology - .5 Credit](#)

In this course students will be introduced to basic medical language and terminology that they would need to enter a health care field. Emphasis will be placed on definitions, proper usage, spelling, and pronunciation. They will study word structure and parts, including roots, prefixes, and suffixes, as well as symbols and abbreviations. They will examine medical terms from each of the body's main systems, including skeletal, muscular, cardiovascular, respiratory, digestive, urinary, nervous, endocrine, reproductive, and lymphatic systems, and sensory organs. In addition, students will learn proper terminology for common tests, procedures, pharmacology, disease, and conditions.

## Electives

### [African American Studies - .5 Credit](#)

This semester-long course traces the experiences of Africans in the Americas from 1500 to the present day. In this course, students will explore history, politics, and culture. Although the course proceeds in chronological order, lessons are also grouped by themes and trends in African American history. Therefore, some time periods and important people are featured in more than one lesson.

## Personal Finance - .5 Credit

Financial literacy is an increasingly essential capability as students prepare for the workforce, and this 18-lesson course provides the information they need to determine if a career in finance is right for them. The course uses games and online discussions to effectively facilitate learning, while introducing your learners to a variety of topics, including investment strategies, money management, asset valuation, and personal finance.

## Theater, Cinema & Film Production - .5 Credit

This one-semester course explores what goes into the making of a theater and film production. The course has 14 lessons that focus on the preproduction, production, and post-production stages of theater and film productions. Students will be introduced to theater and film, and their different genres and subgenres. They will also learn about roles and responsibilities of the cast and crew, including the director, actors, screenplay writers, set designers, wardrobe stylists and costume designers, and makeup artists. The course also covers technical aspects, such as lighting and sound. Students will also learn about the influence of the audience on theater, cinema, and film production. The course combines a variety of content types, including lessons, activities, discussions, and games to keep students engaged as they discover the world of theater, cinema, and film production.

## Academic Success - .5 Credit

As in other areas of life, success in academics results from learning and practicing positive habits. This one-semester elective provides practical, hands-on guidance on developing and improving study habits and skills, regardless of a student's level of accomplishment. Academic Success includes five lessons and two course activities in a flexible structure that is adaptable to the needs and circumstances of individual students. The course can also be used for college-level developmental education.

## Art History & Appreciation - .5 Credit

This course explores the main concepts of art, expression, and creativity as it helps students answer questions such as what is art; what is creativity; and how and why people respond to art. It covers essential design principles such as emphasis, balance, and unity. Units include: Art, History, and Culture; Western and World Art Appreciation; and Art and the Modern World.

## Environmental Science A/B - 1 Credit

This course is designed to introduce students to the history of environmental science in the United States, ecological interactions and succession, environmental change, adaptation, and biogeochemical cycles. Students will learn about the importance of environmental science as an interdisciplinary field. They will describe the importance of biodiversity to the survival of organisms, and learn about ecological pyramids. They will discuss the effects of climate change

and explore different types of adaptation . They will describe the steps of the water cycle, and discuss how carbon, oxygen, nitrogen, and phosphorus cycle in the global environment.

### [Astronomy: Exploring the Universe - .5 Credit](#)

Why do stars twinkle? Is it possible to fall into a black hole? Will the sun ever stop shining? Since the first glimpse of the night sky, humans have been fascinated with the stars, planets, and universe that surrounds us. This course will introduce students to the study of astronomy, including its history and development, basic scientific laws of motion and gravity, the concepts of modern astronomy, and the methods used by astronomers to learn more about the universe. Additional topics include the solar system, the Milky Way and other galaxies, and the sun and stars. Using online tools, students will examine the life cycle of stars, the properties of planets, and the exploration of space.

### [Fashion & Interior Design - .5 Credit](#)

Do you have a flair for fashion? Are you constantly redecorating your room? If so, the design industry might just be for you! In this course, you'll explore what it is like to work in the industry by exploring career possibilities and the background that you need to pursue them. Get ready to try your hand at designing as you learn the basics of color and design then test your skills through hands-on projects. In addition, you'll develop the essential communication skills that build success in any business. By the end of the course, you'll be well on your way to developing the portfolio you need to get your stylishly clad foot in the door of this exciting field.

### [Introduction to Agriscience - .5 Credit](#)

Agriculture has played an important role in the lives of humans for thousands of years. It has fed us and given us materials that have helped us survive. Today, scientists and practitioners are working to improve and better understand agriculture and how it can be used to continue to sustain human life. In this course, students learn about the development and maintenance of agriculture, animal systems, natural resources, and other food sources. Students also examine the relationship between agriculture and natural resources and the environment, health, politics, and world trade.

### [Veterinary Science: The Care of Animals - .5 Credit](#)

As animals play an increasingly important role in our lives, scientists have sought to learn more about their health and well-being. This course examines some of the common diseases and treatments for domestic animals. Toxins, parasites, and infectious diseases impact not only the animals around us, but at times humans as well. Through veterinary medicine and science, the prevention and treatment of diseases and health issues is studied and applied.

### [Introduction to Veterinary Science - .5 Credit](#)

This course is designed to introduce all students at the high school level to the fundamentals of veterinary science, measures to control diseases in animals, and the impact of toxins and poisons

on animal health. The students will explore the history of veterinary science and the skills and requirements for a successful career in the veterinary industry. They will also explore the physiology and anatomy of animals, learn how to evaluate animal health and determine effective treatments for infectious and noninfectious diseases in animals. Additionally, they will learn about zoonotic diseases, and the impact of toxins and poisons on animal health.

### [Introduction to Culinary Arts - .5 Credit](#)

Food is fundamental to life. Not only does it feed our bodies, but it's often the centerpiece for family gatherings and social functions with friends. In this course, you will learn all about food including food culture, food history, food safety, and current food trends. You'll also learn about the food service industry and try your hand at preparing some culinary delights. Through hands-on activities and in-depth study of the culinary arts field, this course will help you hone your cooking skills and give you the opportunity to explore careers in this exciting industry.

### [Culinary Arts A/B - 1 Credit - 1 Credit](#)

This course is designed to enable all students at the high school level to learn the basics of culinary arts. Students will trace the origin and development of the culinary arts; they will also discuss important contributions made by chefs, notable culinary figures, and entrepreneurs. They'll analyze how trends in society influence trends in the food service industry. In addition, they'll examine the social and economic significance of the food service industry and cover topics in health, sanitation, culinary skills, and more. The course is based on Career and Technical Education (CTE) standards designed to help students prepare for entry into a wide range of careers in the culinary industry.

### [World Religions: Exploring Diversity - .5 Credit](#)

Throughout the ages, religions have shaped the political, social, and cultural aspects of societies. This course focuses on the major religions that have played a role in human history, including Buddhism, Christianity, Confucianism, Hinduism, Islam, Judaism, Shintoism, and Taoism. Students trace major developments in these religions and explore their relationships with social institutions and culture. The course also discusses some of the similarities and differences among the major religions and examines their related connections and differences.

### [Introduction to Criminology - .5 Credit](#)

Introduction to Criminology is a one-semester course with 14 lessons that cover the theories related to criminology. The target audience for this course is high school students. This course covers subject areas such as: classical theory, positivist theory, punishing offenders, routine activity theory, labeling theory, social disorganization theory, peacemaking criminology, and many more.

## [Music Appreciation: The Enjoyment of Listening - .5 Credit](#)

Music is part of everyday life and reflects the spirit of our human condition. To know and understand music, we distinguish and identify cultures on local and global levels. This course provides students with an aesthetic and historical perspective of music, covering a variety of styles and developments from the Middle Ages through the 21st Century. Students acquire basic knowledge and listening skills, making their future music experiences more informed and enriching.

## [Early Childhood Education - .5 Credit](#)

Children experience enormous changes in the first few years of their lives. They learn to walk, talk, run, jump, read and write, among other milestones. Caregivers can help infants, toddlers, and children grow and develop in positive ways. This course is for students who want to influence the most important years of human development. In the course, students learn how to create fun and educational environments for children; how to keep the environment safe for children; and how to encourage the health and well-being of infants, toddlers, and school-aged children.

## [Anatomy - .5 Credit](#)

In this course students will explore the anatomy or structure of the human body. In addition to learning anatomical terminology, students will study the main systems of the body- including integumentary, skeletal, muscular, circulatory, respiratory, digestive, reproductive, and nervous systems. In addition to identifying the bones, muscles, and organs, students will study the structure of cells and tissues within the body.

## [Family & Consumer Science - .5 Credit](#)

Family & Consumer Science prepares students with a variety of skills for independent or family living. Topics covered include child care, home maintenance, food preparation, money management, medical management, clothing care, and more. They also focus on household, personal, and consumer health and safety. In addition, students learn goal setting and decision-making skills, as well as explore possible career options.

## [Family Living & Healthy Relationships - .5 Credit - Senior Year Class](#)

In this course, students examine the family unit and characteristics of healthy and unhealthy relationships at different phases of life-- including information on self- discovery, family, friendships, dating and abstinence, marriage, pregnancy, and parenthood. Students learn about the life cycle and the different stages of development from infancy to adulthood. They also focus on a variety of skills to improve relationships and family living, including coping skills, communication skills, refusal skills, babysitting, parenting, and healthy living and disease prevention habits.

### First Aid & Safety - .5 Credit

In this course, students learn and practice first aid procedures for a variety of common conditions, including muscular, skeletal, and soft tissue injuries. In addition, students learn how to appropriately respond to a variety of emergency situations. They also learn the procedures for choking and CPR for infants, children, and adults. In addition to emergency response, students will explore personal, household, and outdoor safety, and disaster preparedness.

### Health Careers - .5 Credit

In this course, students explore a variety of career options related to the health care field, including medicine, nursing, physical therapy, pharmacy, dental careers, sports medicine, personal training, social work, psychology, and more. Students will learn about various options within each field, what each of these jobs entails, and the education and knowledge required to be successful. In addition, they will focus on basic job skills and information that would aid them in health care and other career paths.

### Intro to Nursing 1 - .5 Credit

This course introduces students to the field of nursing. Students will learn about the history and evolution of nursing, education and licensure requirements, career path options, and nursing responsibilities. Students will also focus on foundational information such as basic anatomy, physiology, medical terminology, pharmacology, first aid, and disease prevention. In semester two students will examine various nursing theories, as well as focus on the nursing process, including assessment, diagnosis, and treatment options. Students will also learn about professional and legal standards and ethics. Additional skills of communication, teaching, time and stress management, patient safety, crisis management will be included.

### Intro to Nursing 2 - .5 Credit

This course introduces students to the field of nursing. Students will learn about the history and evolution of nursing, education and licensure requirements, career path options, and nursing responsibilities. Students will also focus on foundational information such as basic anatomy, physiology, medical terminology, pharmacology, first aid, and disease prevention. In semester two students will examine various nursing theories, as well as focus on the nursing process, including assessment, diagnosis, and treatment options. Students will also learn about professional and legal standards and ethics. Additional skills of communication, teaching, time and stress management, patient safety, and crisis management will be included.

### Life Skills - .5 Credit

This course allows students to explore their personality type and interests, as well as refine important skills that will benefit them throughout their lives, including personal nutrition and fitness skills, time & stress management, communication & healthy relationships, goal setting, study skills, leadership and service, environmental and consumer health, and personal finances. In

addition, students will explore possible colleges and careers that match their needs, interests, and talents.

### Nutrition & Wellness - .5 Credit

This course focuses on essential knowledge about nutrition and wellness for health, fitness, and disease prevention. The course includes basic concepts of nutrition, the digestive and metabolic processes, nutrient requirements, dietary guidelines, menu planning, the importance of physical fitness, community health issues, food-related technology, and careers in the field of nutrition and wellness.

### Strength Training - .5 Credit

This one-semester course by Carone Fitness focuses on the fitness components of muscular strength and endurance. Throughout this course students establish their fitness level, set goals, and design their own resistance training program. They study muscular anatomy and learn specific exercises to strengthen each muscle or muscle group. Students focus on proper posture and technique while training. They also gain an understanding of how to apply the FITT principles and other fundamental exercise principles, such as progression and overload, to strength training.

## World Languages

Note: College and University admissions require varying levels of Foreign Language Requirements. Check with the college/university to know what will be required for admissions AND graduation from that college.

### Spanish 1 A/B - 1 Credit

Spanish is the most spoken non-English language in U.S. homes, even among non-Hispanics, according to the Pew Research Center. There are overwhelming cultural, economic, and demographic reasons for students to achieve mastery of Spanish. Spanish 1A and B engage students and use a variety of activities to ensure student engagement and to promote personalized learning. These courses can be delivered completely online, or implemented as blended courses, according to the unique needs of the teacher and the students.

## Spanish 2 A/B - 1 Credit

Spanish 2A and B utilize three assessment tools that are designed specifically to address communication using the target language: Lesson Activities, Unit Activities, and Discussions. These tools help ensure language and concept mastery as students grow in their understanding and use of Spanish. Learning games specifically designed for language learning are used and can be accessed on a wide variety of devices.

## Spanish 3 A/B - 1 Credit

Spanish 3A and B take a unique approach by setting the lessons in each unit in a specific Spanish-speaking locale, immersing students in the language and in a variety of Hispanic cultures and issues. For example, Unit 5 in Semester B includes a discussion of the environmental issues in Argentina. Concluding the three-year cycle of Spanish courses, Spanish 3A and B effectively combine group and individual learning and offer activities and assessments to keep students engaged and on track.

# Health & PE

## Health - .5 Credit

This course is based on a rigorously researched scope and sequence that covers the essential concepts of health. Students are provided with a variety of health concepts and demonstrate their understanding of those concepts through problem solving. The five units explore a wide variety of topics that include nutrition and fitness, disease and injury, development and sexuality, substance abuse, and mental and community health.

## Physical Education - .5 Credit

This course's three units include Getting Active, Improving Performance, and Lifestyle. Unit activities elevate students' self-awareness of their health and well-being while examining topics such as diet and mental health and exploring websites and other resources. In addition to being effective as a stand-alone course, the components can be easily integrated into other health and wellness courses.