

Language Arts

Contemporary Novels

For this course, students will read a set of novels and novellas that were written during the 20th Century and reflect themes common to contemporary literature, such as the ability of the human spirit to rise above seemingly-impossible circumstances. Through creative projects and writing assignments, students will identify and analyze each novel's themes and also compare and contrast the novels' treatment of common themes. Please note that, like most contemporary literature, the novels assigned for this course contain realistic situations and language. In addition to the novels listed, each student will read another contemporary novel of his or her choosing that the instructor must approve. MLA (Modern Language Association) documentation is required on all papers submitted.

Creative Writing A&B

At the beginning of the Semester A, students consider the importance of word play exercises in improving their facility with language while building a compelling and creative writing style. Focusing on word nuances and precision, later lessons guide students to write in a variety of short modes, including poetry, song lyrics, prose poetry, short stories, and creative nonfiction. There are several opportunities for peer review in this semester, during which students learn best practices for participating in writing workshops, and then revise their work using feedback from their peers.

Semester B focuses on longer works of fiction: short stories, plays, and novels. Students learn basic techniques of plot and character development along with strategies for creating suspense and building a theme. They have opportunities to write in several different genres. Lessons cover a few special topics as well, including graphic novels, animation, comedy, and improvisation. Students apply what they have learned about writing workshops and revising to the longer pieces of writing they create for this semester.

Language Arts 9 A&B

English for grade 9 is an integrated curriculum. Each unit contains thematically related lessons in five domains: reading and the study of literature, reading informational text, writing, speaking and listening, and language study, which includes word knowledge and grammar skills. Topics are presented in ways that help young adolescents relate literacy skills to other aspects of their lives. Writing assignments include narrative, expository, and persuasive/argumentative modes and emphasize the use of details and reasoning to support ideas. Speaking and listening lessons in semester A emphasize collaborative discussion skills and peer review. Vocabulary development instruction is integrated into literature and informational text lessons. Each unit ends with an authentic assessment that presents students with a real-world scenario requiring some of the skills they learned in the unit.

Like semester A, semester B consists of integrated units focused on a theme or mode of study. Literature study in semester B focuses on the analysis of different forms of literature and on comparative studies of world literature and literature delivered in different media. Writing and informational text lessons guide students through the stages of research and demonstrate how to evaluate, integrate, and share the information gathered during research. Students are required to share their ideas and analysis using several different modes, including oral and multimedia presentations.

Language Arts 9 A&B Honors

English Honors for grade 9 is an integrated curriculum with challenging assignments aimed at preparing Honors-level students for advanced work in the study of literature and language arts. Each unit contains thematically related lessons in five domains: reading and the study of literature, reading informational text, writing, speaking and listening, and language study, which includes word knowledge and grammar skills. Topics are presented in ways that help young adolescents relate literacy skills to other aspects of their lives. Writing assignments include narrative, expository, and persuasive/argumentative modes and emphasize the use of details and reasoning to support ideas. Speaking and listening lessons in semester A emphasize collaborative discussion skills and peer review. Vocabulary development instruction is integrated into literature and informational text lessons. Each unit ends with an authentic assessment that presents students with a real-world scenario requiring some of the skills they learned in the unit.

Assignments that are specific the Honors level of this course ask students to apply advanced skills earlier in the course and more often than students in the regular version of English 9. For example, students move immediately beyond the identification of literary elements or aspects of informational text to the analysis of these components. Likewise, Honors students don't simply recognize and describe rhetorical strategies—they also use these strategies to create specific effects. Some Honors assignments require students to go one step farther in developing an assignment-for instance, writing an essay after generating



ideas for the essay using the worksheet provided to students in the regular course. Clear and extensive guidelines are provided for each Honors assignment along with a detailed rubric for evaluation.

Like Semester A, Semester B of English 9 Honors consists of integrated units focused on a theme or mode of study. Literature study in Semester B focuses on the analysis of different forms of literature and on comparative studies of world literature and literature delivered in different media. As in Semester A, Honors assignments in this semester require students to take a more analytical or active approach to many of the assignments and activities in the course. Honors students will write more often and more deeply about topics and also reflect more critically on the processes they use to read and write. Writing and informational text lessons guide students through the stages of research and demonstrate how to evaluate, integrate, and share the information gathered during research. Students are required to share their ideas and analysis using several different modes, including oral and multimedia presentations.

Language Arts 10 A&B

In English 10 Semester A, students learn how to express their thoughts and feelings in writing. Emphasis is placed on the specific traits of the 6-Traits of Writing: Ideas, Organization, Voice, Word Choice, Sentence Fluency, and Conventions. Students also review the 5-step writing process as they practice the skills of prewriting, drafting, revising, editing, and publishing.

Each unit also includes instruction in the Greek roots of common English words. In Semester A, students are guided through the 5-step writing process for each of the major types of writing: expository, persuasive, expressive, research, and functional. The writing projects center on each of the five major types. Students will receive comprehensive instruction on the various structures and styles of writing. Students are expected to produce original, high quality examples of each of the major types of writing. Writing samples are graded against the 6-Traits of Writing.

In English 10 Semester B, students broaden their reading experience with exposure to literature from around the world. Students are given vast exposure to a variety of reading samples, and are encouraged to connect and relate to the various authors and cultures within the contexts of the passages and works. Reading strategies, the literary elements, and new vocabulary and Latin roots are introduced. In addition, students are guided through an active reading process in preparation for high-stakes testing, which will assess their abilities to make inferences, comprehend, and analyze a variety of reading materials.

Students are expected to respond to assigned reading materials in a variety of activities and manners. Students will be graded on their abilities to review, summarize, analyze, connect, and respond to reading materials. Additionally, students will practice important reading strategies such as determining the meaning of unfamiliar words. They will

produce an independent vocabulary assignment as evidence of their familiarity with these strategies. Students are also expected to create original materials in an effort to grasp the complexity of the genres.

Language Arts 10 A&B Honors

Honors students are expected to complete additional assignments throughout the course that build on the content provided. These assignments, like analyzing how a producer puts a movie together to develop theme, makes these students go above and beyond the curriculum content in creativity and application.

In English 10 Semester A, students learn how to express their thoughts and feelings in writing. Emphasis is placed on the specific traits of the 6-Traits of Writing: Ideas, Organization, Voice, Word Choice, Sentence Fluency, and Conventions. Students also review the 5-step writing process as they practice the skills of prewriting, drafting, revising, editing, and publishing.

Each unit also includes instruction in the Greek roots of common English words. In Semester A, students are guided through the 5-step writing process for each of the major types of writing: expository, persuasive, expressive, research, and functional. The writing projects center on each of the five major types. Students will receive comprehensive instruction on the various structures and styles of writing. Students are expected to produce original, high quality examples of each of the major types of writing. Writing samples are graded against the 6-Traits of Writing.

In English 10 Semester B, students broaden their reading experience with exposure to literature from around the world. Students are given vast exposure to a variety of reading samples, and are encouraged to connect and relate to the various authors and cultures within the contexts of the passages and works. Reading strategies, the literary elements, and new vocabulary and Latin roots are introduced. In addition, students are guided through an active reading process in preparation for high-stakes testing, which will assess their abilities to make inferences, comprehend, and analyze a variety of reading materials.

Students are expected to respond to assigned reading materials in a variety of activities and manners. Students will be graded on their abilities to review, summarize, analyze, connect, and respond to reading materials. Additionally, students will practice important reading strategies such as determining the meaning of unfamiliar words. They will produce an independent vocabulary assignment as evidence of their familiarity with these strategies. Students are also expected to create original materials in an effort to grasp the complexity of the genres.

Language Arts 11 A&B

English for grade 11 is an American Literature course, with units organized chronologically according to periods in literary history. As students read foundation works of literature and other historical documents written between 1600 and

1900, they'll review and extend skills in five domains: analyzing literature, analyzing informational text, writing, speaking and listening, and language study, which includes word knowledge and grammar skills.

Each module or unit begins with a lesson that provides historical context for the era and introduces themes that emerged in the literature of that era. Each lesson provides students with an opportunity to review basic analysis skills before applying those skills to works of literature or key historical documents. Lessons focused on more difficult historical documents include activities that help students comprehend the complex ideas in these works.

Writing modes addressed in Semester A of this course include narrative, reflective, persuasive, and analytical modes. Assignments emphasize the use of details, evidence, and reasoning to support ideas. Writing lessons include model essays that demonstrate key features of each mode. The speaking and listening lessons in Semester A cover rhetoric, the peer review or writing workshop process, and performance skills. Vocabulary development instruction is integrated into literature and informational text lessons. Each unit ends with an authentic assessment that presents students with a real-world scenario requiring some of the skills they learned in the unit.

Semester B of English 11 consists of units focused on historical eras and literary movements of the 20th and 21st Centuries, such as Naturalism, Imagism, the Harlem Renaissance, and Post-Modernism. Literature analysis lessons in Semester B focus on the forms of literature that were most commonly written during the 20th Century and how the forms, styles, and techniques of that century inform literature written today.

Students will also evaluate various modes and forms of language expression, including single media and multimedia messages. Writing and informational text lessons guide students through the stages of a rigorous research process and demonstrate how to evaluate, integrate, and share the information gathered during research. Students are required to share their ideas and analysis using several different modes, including oral and multimedia presentations.

Language Arts 11 A&B Honors

Honors students are expected to complete additional assignments throughout the course that build on the content provided. These assignments, like writing a children's book, make the students go above and beyond the curriculum content in creativity and application.

Honors English 11 is an American Literature course, with units organized chronologically according to periods in literary history. As students read foundational works of literature and other historical documents written between 1600 and 1900, they'll review and extend skills in five domains: analyzing literature, analyzing informational text, writing, speaking and listening, and language study, which includes

word knowledge and grammar skills.

Each module or unit begins with a lesson that provides historical context for the era and introduces themes that emerged in the literature of that era. Each lesson provides students with an opportunity

to review basic analysis skills before applying those skills to works of literature or key historical documents. Lessons focused on more difficult historical documents include activities that help students comprehend the complex ideas in these works. The Honors level of the course provides additional challenging assignments aimed at preparing college-bound students for advanced work in the study of literature and language arts.

Writing modes addressed in Semester A of this course include narrative, reflective, persuasive, and analytical modes. Assignments emphasize the use of details, evidence, and reasoning to support ideas. Writing lessons include model essays that demonstrate key features of each mode. The speaking and listening lessons in semester A cover rhetoric, the peer review or writing workshop process, and performance skills. Vocabulary development instruction is integrated into literature and informational text lessons. Each unit ends with an authentic assessment that presents students with a real-world scenario requiring some of the skills they learned in the unit.

Semester B of Honors English 11 consists of units focused on historical eras and literary movements of the 20th and 21st Centuries, such as Naturalism, Imagism, the Harlem Renaissance, and Post-Modernism. Literature analysis lessons in Semester B focus on the forms of literature that were most commonly written during the Twentieth Century and how the forms, styles, and techniques of that century inform literature written today.

Students will also evaluate various modes and forms of language expression, including single media and multimedia messages. Writing and informational text lessons guide students through the stages of a rigorous research process and demonstrate how to evaluate, integrate, and share the information gathered during research. Students are required to share their ideas and analysis using several different modes, including oral and multimedia presentations. As in Semester A, the second semester of Honors English 11 provides additional challenging assignments aimed at preparing college-bound students for advanced work in the study of literature and language arts.

Language Arts 12 A&B

Students examine major works of literature organized into thematic units. Each unit contains poetry, short stories, and a novel that revolve around the theme for the unit. Themes include the self, relationships, alienation, choice, and death. As students read these works, they have the opportunity to reflect on these important themes by writing in multiple modes and creating cross-disciplinary projects.

Language Arts 12 A&B Honors

Students examine major works of literature organized into thematic units. Each unit contains poetry, short stories, and a novel that revolve around the theme for the unit. Themes include the self, relationships, alienation, choice, and death. As students read these works, they have the opportunity to reflect on these important themes by writing in multiple modes and creating cross-disciplinary projects.

As an Honors course, emphasis will be placed on additional reading and writing project-based instruction. Students will integrate the 6-Traits of Writing (i.e., ideas and content, organization, voice, word choice, sentence fluency, and conventions) to all of their writing.

Speech

This course is an introduction to public speaking that emphasizes the communication process, types of speeches, and argumentation. The purpose of this course is to prepare students for public speaking situations, decrease speaker anxiety, and provide them with basic principles of research and organization needed for effective speeches.

Mathematics

Algebra 1 A&B

Students begin the first semester of Algebra 1 with a review of the basic tools of algebra, including properties of operations, combining like terms, and solving simple equations and inequalities. More complex concepts are built on these basics. Students learn about linear models, linear inequalities, statistics, linear functions, transformations, sequences, and systems of linear equations. The course also includes lessons on linear inequalities.

In the second semester of Algebra 1, students focus on exponential and quadratic functions. They will learn how to read, write, and graph these function types. They will also learn where they can find exponential and quadratic functions in their own worlds. In this semester, special attention is given to making meaningful comparisons of linear, exponential, and quadratic growth. Students also spend time learning about geometric sequences, polynomials, factoring, radical equations, piece-wise defined functions, as well as rational expressions and equations. The semester concludes with a comprehensive review of the course.

Algebra 1 A&B Honors

In the honors course, students will do in-depth study, problem-solving, and application of algebraic concepts.

Students begin the first semester of Algebra 1 with a review of the basic tools of algebra, including properties of operations, combining like terms, and solving simple equations and inequalities. More complex concepts are built on these basics. Students learn about linear models, linear inequalities, statistics, linear functions, transformations, sequences, and systems of linear equations. The course also includes lessons on linear inequalities.

In the second semester of Algebra 1, students focus on exponential and quadratic functions. They will learn how to read, write, and graph these function types. They will also learn where they can find exponential and quadratic functions in their own worlds. In this semester, special attention is given to making meaningful comparisons of linear, exponential, and quadratic growth. Students also spend time learning about geometric sequences, polynomials, factoring, radical equations, piece-wise defined functions, as well as rational expressions and equations. The semester concludes with a comprehensive review of the course.

Algebra 2 A&B

Algebra 2 Semester A further extends the learner's understanding of major algebra concepts such as expressions, equations, functions, and inequalities. An emphasis will be placed on the use of appropriate functions to model real, world situations and solve problems that arise from those situations. A focus is also on graphing functions by hand and understanding and identifying the parts of a graph.

Algebra 2 Semester B builds on the concepts learned in the first semester and prepares the learners with the building blocks needed to dive deeper into trigonometry, pre-calculus, and advanced probability and statistics.

Algebra 2 A&B Honors

In the honors course, students will do an in-depth study, problem-solving, and application of algebraic concepts.

Honors Algebra 2 Semester A further extends the learner understanding of major algebraic concepts such as expressions, equations, functions, and inequalities. An emphasis will be placed on the use of appropriate functions to model real-world situations and solve problems that arise from those situations. A focus is also on graphing functions by hand and understanding and identifying the parts of a graph.

Semester B of Honors Algebra 2 builds on the concepts learned in the first semester and prepares learners with the building blocks needed to dive deeper into trigonometry, pre-calculus, and advanced probability and statistics.

Calculus A&B

This High School Calculus course is designed with the intent for students to incorporate the concepts of all previous math courses and expand upon these concepts with the implementation of limits. Emphasis is placed upon the multi-representational approach to calculus where problems and their solutions are explored and interpreted graphically, numerically, analytically, and verbally. Students will also be required to explain their answers in written form and will be asked to compare their written responses to the grading rubric and explain why they feel they should receive that grade. Students are required to use graphing calculators. These calculators will be used in a variety of ways including multi-representation of equations (graphs and tables) and for conducting explorations with various functions and how different values change the look of the function.

Consumer Math A&Bo

This course focuses on the mathematics involved in making wise consumer decisions. Students explore the many ways in which mathematics affects their daily lives. The first semester will cover paychecks and wages, taxes,



insurance, budgets, bank accounts, credit cards, interest calculations, and comparison shopping. Second semester topics include vehicle and home purchasing, investing, and business and employee management.

Geometry A&B

Geometry is the study of the measurement of the world. What makes geometry so engaging is the relationship of figures and measures to each other and how these relationships can predict results in the world around us. Through practical applications, the student sees how geometric reasoning provides insight into everyday life. The course begins with the tools needed in geometry. From these foundations, the student explores the measure of line segments, angles, and two-dimensional figures. Students will learn about similarity, triangles, and trigonometric ratios. Geometry A consists of six modules. Each module comprises ten lessons for a total of 60 lessons in the course.

This course builds on the foundation of the first terms in Geometry. As in previous courses, deductive and inductive reasoning are emphasized, while applying problem-solving techniques to real-world problems. Students explore quadrilaterals and circles and learn how an object is transformed, as well as how to represent that transformation algebraically and geometrically. Students calculate area and volume of two-dimensional and three-dimensional objects. Geometry B consists of six modules. Each module comprises ten lessons for a total of 60 lessons in the course.

Geometry A &B Honors

Honors students are expected to complete several assignments within each module that demonstrate their knowledge of the applications of geometry.

Geometry Honors is the study of the measurement of the world, with a focus on application of geometric concepts. What makes geometry so engaging is the relationship of figures and measures to each other, and how these relationships can predict results in the world around us. Through real-world applications, the honors student sees how geometric reasoning provides insight into everyday life. The course begins with the tools needed in geometry. From these foundations, the student explores the measure of line segments, angles, and two-dimensional figures. Students will learn about similarity, triangles, and trigonometric ratios. Geometry A consists of six modules. Each module comprises of ten lessons for a total of 60 lessons in the course.

This course builds on the foundation of the first terms in geometry. As in previous courses, deductive and inductive reasoning are emphasized, while applying problem-solving techniques to real-world problems. Students explore quadrilaterals and circles and learn how an object is transformed, as well as how to represent that transformation algebraically and geometrically. Students calculate area and volume of two-dimensional and three-dimensional objects. Geometry B consists of six modules. Each module comprises ten lessons for a total of 60 lessons in the course.

Integrated Math 1 A&B

In Integrated Math 1, students use arithmetic properties of subsets of integers, rational, irrational, and real numbers by simplifying expressions, solving linear equations and inequalities, graphing equations, finding the equation of a line, working with monomials and polynomials, and factoring and completing the square. Students use properties of the number system to judge the validity of results, justifying each step of the procedure to prove or disprove statements. Students compute perimeter, circumference, area, volume, and surface area of geometric figures. Students also use basic trigonometric functions defined by the angles of a right triangle.

Integrated Math 2 A&B

Students in Integrated Math 2 will focus on pulling together and applying the accumulation of learning that they have acquired from their previous math courses. They will apply methods from probability and statistics; expand their repertoire of functions to include polynomial, rational, and radical functions; and expand they study of the right triangle trigonometry. In addition, they will bring together all of their experience with functions and geometry to create models and solve contextual problems.

Integrated Math 3 A&B

Integrated Math Semester A extends the learner understanding of major algebra concepts such as expressions, equations, functions, and sequences and series. It also extends the learner understanding of geometric concepts such as triangles and trigonometric ratios. An emphasis will be placed on the use of appropriate functions to model real-world situations and solve problems that arise from those situations. A focus is also on graphing functions by hand and understanding and identifying parts of a graph.

Integrated Math Semester B continues in learner studies of algebraic and geometric concepts. This course covers the concepts of probability and statistics, area, volume, conic sections, trigonometric functions, and trigonometric identities. An emphasis will be placed on the use of appropriate functions to model real-world situations and solve problems that arise from those situations.

Math Essentials A&B

Students begin the first semester of this course with a review of how to use basic arithmetic operations with whole numbers, integers, fractions, mixed numbers, and decimals. More complex concepts are built on these basics. Students revisit simplifying order of operation problems. They will also learn how to apply the properties of addition and multiplication, as well as the distributive property, to equation solving. This semester ends with a review of solving inequalities in one- and two-steps.

In the second semester of this course, students learn about ratios, rates, and proportions, and find where they can use these concepts in their own lives. Students will also work with percentages. They will perform calculations and apply percentages to real world scenarios. This semester includes a study of the coordinate plane and linear equations. Students revisit plotting ordered pairs, graphing and writing equations, as well as using these ideas to solve everyday problems. In the latter half of this semester, students will focus on where you can find different kinds of equations in the world outside the mathematics classroom, with a focus on interest applications. Finally, students will renew their geometry knowledge through a study of triangles, quadrilaterals, area, surface area, and volume. The course concludes with an in-depth look at reading, creating, and interpreting scatterplots.

Pre-Algebra A&B

Pre-Algebra A leads students from basic mathematics to the study of higher mathematics such as Algebra and Geometry. Students will develop the mathematical skills that are essential for lifelong success. Students will engage with real-world scenarios, expanding the way they think and solve problems. Students will also learn how to confront and solve abstract problems with confidence, all while enjoying a bit of humor along the way. Students will begin their Pre-Algebra journey with Expressions, Equations, and Inequalities, and finish the semester with Ratios, Rates, and Proportions. Throughout this meticulously designed curriculum, every concept presented is accompanied by relatable examples and supportive scaffolding. Instruction is delivered in six dynamic modules, comprised of 10 lessons each, for a total of 60 lessons, containing a diverse array of learning tools such as text pages, videos, interactive activities, worksheets, and practice problems. Students will have the flexibility of asynchronous learning, allowing them to study, learn, and solve algebraic problems at their own pace.

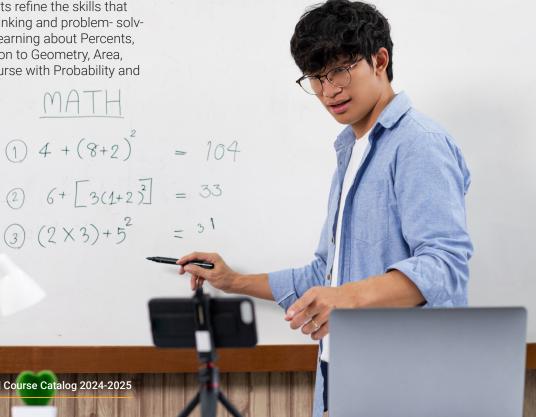
Pre-Algebra B propels students into more advanced mathematical concepts. Building on the solid foundation laid by the Pre-Algebra A course, Pre-Algebra B explores more abstract concepts, helping students refine the skills that are essential for both algebraic thinking and problem-solving. Students start the semester learning about Percents, Simple Interest, and Taxes, move on to Geometry, Area, and Volume, and conclude the course with Probability and Statistics.

This comprehensive curriculum is enriched with many hands-on activities and engaging demonstration videos that guide students toward a concrete understanding of fundamental mathematical principles. Using scaffolded instruction, students will demonstrate their mastery of each algebraic skill by completing numerous practice problems and assessments. This semester-long course consists of six modules, each comprised of 10 lessons, for a total of 60 lessons. Learning is supported by a diverse array of tools such as text pages, videos, interactive activities, worksheets, and practice problems. In addition, students will have the flexibility of asynchronous learning, allowing them to study, learn, and solve algebraic problems at their own pace.

Pre-Calculus A&B

In this course, students will understand and apply concepts, graphs, and applications of a variety of families of functions, including polynomial, exponential, logarithmic, logistic, and trigonometric. An emphasis will be placed on use of appropriate functions to model real-world situations and solve problems that arise from those situations. A focus is also on graphing functions by hand and understanding and identifying the parts of a graph. A scientific and/or graphics calculator is recommended for work on assignments and on examinations.

Pre-Calculus Semester B covers the major units of introductory trigonometry and graphs, trigonometric equations and identities, analytical trigonometry, sequences and series, conic sections, and an introduction to calculus. A focus is also on graphing functions by hand and understanding and identifying the parts of a graph.





Anatomy and Physiology A&B

The aim of this course is to expand upon what was learned in biology class, while emphasizing the application of this material to human structures and functions. This course begins the study of human beings at the microscopic level and works its way up to an in-depth study of select organ systems. Special emphasis will be placed upon applying and demonstrating the information learned in this course through, not only tests and guizzes, but through special projects and collaboration as well.

Semester B is designed to give the student an understanding of how structure and function are related in the human body. The student will study the human body from the cellular level to the organ system level. All of the major body systems will be studied in great detail. Additionally, biochemistry, cell biology, histology, biotechnology, bioethics, and pathology will also be studied. This course is highly recommended for students seeking a career in science or a health-related profession.

Biology A&B

Biology A introduces students to the scientific method and the major concepts of biology from a historical and practical viewpoint. The three major themes of this course are the cell, the molecular basis of heredity, and the interdependence of organisms. Students who take this class will have a deeper appreciation for the complexities of living organisms. Life on this planet, unlike anywhere else in the observable universe, is complex and highly organized. Whether examining life on the molecular or the planetary level, it exhibits a highly organized structure that inspires awe by its genius and complexity. In the last 50 years, discoveries have launched new branches of biology that have transformed the daily routine, from conception to death. New challenges await, such as the current crisis in ecology, global warming, and the resurgence in viral disease. To make rational choices in the 21st Century, the citizen must have a basic understanding of biological concepts and the reasoning behind them. Biology A is presented in a multimedia format using interactive modules, labs, narrated animation, text, and videos to present the study of life on this planet. Students work through and complete several self-check activities and guizzes for practice and participate in self-reflection. In each unit, students complete the unit exam and deliver a unit project. Teacher feedback is provided throughout the course.

Biology B is a continuation of the basic course in biology, Biology A. The major concepts covered are population dynamics and evolution. Students explore population dynamics through the study of mutualism, predation, parasitism, and competition. The theory of evolution is presented, along with the many evidences and details that make evolution the backbone of modern biology. From biochemistry to evolution, biology fascinates people. Biochemists first astounded the world by showing that life obeys the same chemical principles as all creation, but that life engineers chemistry to its own needs. Decades later, Darwin shocked the world by suggesting that life evolves according to the conditions of the environment it inhabits. Evolution, often debated and derided, has survived to become a key concept of biology. This second course in biology examines the wonder of life and its mechanisms. Students work through and complete several self-check activities and quizzes for practice and participate in self-reflection. In each unit, students complete the unit exam and deliver a unit project. Teacher feedback is provided throughout the course.

Biology A&B Honors

Honors students are expected to complete additional assignments throughout the course that build on the content provided. These assignments allow these students to go above and beyond the curriculum content in creativity and application. Students work through and complete several self-check activities and guizzes for practice, and they participate in self-reflection. In each unit, students complete the unit exam. Teacher feedback is provided throughout the course.

The science of biology must begin with cell theory, including the structure, function, and chemistry of the cell. Cells form the primary level of organization of all living things. The chemistry and function of each cell shapes the lifestyle of the organism, from feeding to reproductive patterns. This first course in biology focuses on the life of the cell, dealing with issues of structure, transport, genetics, protein synthesis, energy production, and usage. The tools of science are explained and then focused on the living systems in the cell. In the case of genetics, the molecular behavior of DNA is elaborated to show how it determines the visible traits of the organism and population. Thus, students are led on a tour of living systems from the tiniest to the broadest levels

of organization. During this tour, students will employ text, computer simulations, videotaped labs, and hands-on investigation to verify each concept and make them relevant to what is seen each day. The aim of this course is to guide the student to see the world in biological terms and then to expand their vision to contemplate current topics in biological research and application.

Biology B is a continuation of the basic course in biology, Biology A. The major concepts covered are population dynamics and evolution. Students explore population dynamics through the study of mutualism, predation, parasitism, and competition. The theory of evolution is presented, along with the many evidences and details that make evolution the backbone of modern biology. From biochemistry to evolution, biology fascinates people. Biochemists first astounded the world by showing that life obeys the same chemical principles as all creation, but that life engineers chemistry to its own needs. Decades later, Darwin shocked the world by suggesting that life evolves according to the conditions of the environment it inhabits. Evolution, often debated and derided, has survived to become a key concept of biology. This second course in biology examines the wonder of life and its mechanisms.

Chemistry A&B

Chemistry A introduces students to the science of chemistry, beginning with exploring why scientists are interested in studying matter at a submicroscopic level. Students will continue to learn how scientific methods are used to understand the natural world and will continue to develop their skills in this area. Chemistry A covers topics in the characteristics of matter, atomic structure, chemical periodicity, chemical bonds and compounds, and chemical formula writing and naming. An algebra background is recommended because of the amount and type of math involved.

Chemistry B builds on the concepts and skills learned in the first semester as students continue to explore the properties of matter and the changes it undergoes. Chemistry B covers topics in chemical reactions and stoichiometry, gases, thermochemistry, kinetics, equilibrium, acids and bases, organic chemistry, and biochemistry. An algebra background is recommended because of the amount and type of math involved.

Chemistry A&B Honors

Honors students are expected to complete several assignments within each module that demonstrate their knowledge of the applications of chemistry.

Chemistry A introduces students to the science of chemistry, beginning with exploring why scientists are interested in studying matter at a submicroscopic level. Students will continue to learn how scientific methods are used to understand the natural world and will continue to develop their skills in this area. Chemistry A covers topics in the characteristics of matter, atomic structure, chemical periodicity, chemical bonds and compounds, and chemical formula writing and naming. An algebra background is recommended because of the amount and type of math involved.

Chemistry B builds on the concepts and skills learned in the first semester as students continue to explore the properties of matter and the changes it undergoes. Chemistry B covers topics in chemical reactions and stoichiometry, gases, thermochemistry, kinetics, equilibrium, acids and bases, organic chemistry, and biochemistry. An algebra background is recommended because of the amount and type of math involved.

Earth Science A&B

The Earth Science course will explore the dynamic systems of Earth and Space to help students understand how Earth systems have developed through time, how they are interrelated, and how humans impact them. In the first semester, students will investigate the universe and its stars, the planets of the Solar System, and the systems that make up Earth. Students will examine the role of water on our planet and sun-driven interactions affecting climate and weather. They will also model biogeochemical cycles and energy flow through Earth systems. Students will use critical thinking and problem-solving skills to learn through videos, readings, interactive activities, mini-projects, labs, and simulations based on real-world data.

In the second semester, students will explore how Earth surface changes through plate tectonics and geological processes. Students will also take a step back in time to see how the Earth and life developed through its timescale. By the end of the course, students will be able to explain the different systems on Earth, how they affect each other, and how the Earth is changing due to human activity. This course will give students tools and information to examine their daily choices in response to ongoing natural hazards like climate change and find ways to protect the Earth and its natural resources. These course assignments are designed to explicitly engage students Next Generation Science Standards (NGSS) Performance Expectations (PEs). Also, students will apply Science and Engineering Practices (SEPs) to construct an understanding of Disciplinary Core Ideas (DCIs) through the lens of Crosscutting Concepts (CCs) to explain a phenomenon. The discussion assignments focus on enabling students to use their science knowledge to make informed decisions about personal and societal issues. Students will be assessed through lesson quizzes and semester exams.

Marine Science

About 70% of the Earth is covered by water. Even today, much of the world's oceans remain unexplored. Marine scientists make exciting new discoveries about marine life every day. In this course, students will discover the vast network of life that exists beneath the ocean's surface and study the impact that humans have on the oceans.

Paleontology

From Godzilla to Jurassic Park, dinosaurs continue to captivate us. In this course, students will learn about the fascinating creatures, both large and small, that roamed the earth before modern man. Students will watch interesting videos from experts at The Royal Tyrrell Museum, a leading paleontology research facility, and discover how the field of paleontology continues to provide amazing insight into early life on earth.

Physical Science A&B

This is an introduction to the physical sciences and scientific methodology. The objectives are to impart a basic knowledge of the physical properties and chemistry of matter. Skills are developed in the classroom and reinforced through homework reading and interesting labs that relate to everyday life.

Physics A&B

Students begin their exploration of physics by reviewing the International System of Units (SI), scientific notation, and significant digits. They then learn to describe and analyze motion in one and twodimensions. Students learn about gravity and Newton's laws of motion before concluding the course with an examination of circular motion, energy, and simple machines. Students apply mathematical concepts such as graphing and trigonometry in order to solve physics problems.

Physics B continues the student's exploration of mechanics while also guiding them through some other important topics of physics. Students begin by exploring simple harmonic motion, wave properties, and optics. Students then learn the basics of thermodynamics and fluids. Afterwards, the students explore the principles of electricity and magnetism. Finally, students explore the area of physics known as modern physics, which includes topics such as the photoelectric effect, nuclear science, and relativity. This is a trig-based course. It is assumed students know and can use trigonometry.

Physics A&B Honors

Honors students are expected to complete several assignments within each module that demonstrate their knowledge of the applications of physics.

Students begin their exploration of physics by reviewing the International System of Units (SI), scientific notation, and significant digits. They then learn to describe and analyze motion in one and two dimensions. Students learn about gravity and Newton's laws of motion before concluding the course with an examination of circular motion. Students apply mathemat-

ical concepts, such as graphing and trigonometry, in order to solve physics problems. Throughout the course, students apply their understanding of physics by playing roles like science museum curator and elementary teacher.

Physics B continues the student's exploration of mechanics while also guiding them through some other important topics of physics. Students begin by exploring simple harmonic motion, wave properties, and optics. Students then learn the basics of thermodynamics and fluids. Afterwards, the students explore the principles of electricity and magnetism. Finally, students explore the area of physics known as modern physics, which includes topics such as the photoelectric effect, nuclear science, and relativity. This is a trig-based course. It is assumed students know and can use trigonometry.

Renewable Energy

The earth's population is growing rapidly, and we need to find new, innovative ways to ensure that we are able to provide for our global energy needs. Students will look at the reasons why sustainability is important, take a balanced and evidence-based look at climate change, and learn new ways that we can harness renewable resources.

Space Explorations

From the history of rockets to the potential explorations of humans beyond Earth, this course introduces students to space exploration. Students will study the history of space flight from manned and unmanned flights and what it means to launch, explore, and land using spacecraft.



Social Studies

American Government

This course will guide students through an in-depth study of the history, structure, and guiding principles of American government. The first unit will review the origins of government in general and American government in particular—from the earliest models for democracy to the founding documents that created a federalist system of government in the U.S. Several units will help students explore the roles and responsibilities of each branch of government, as well as the impact that the Constitution has had and continues to have on the way government works and on the lives of individual Americans. The course's final unit will guide students through a series of projects that require them to apply what they have learned about American government to an issue that interests them.

American Government Honors

American Government Honors provides the student with the basic knowledge of the history and philosophy of the United States government and the principles that guide our democracy. The student examines the United States Constitution to answer questions and determine the facts of government. The course focuses on the functions and duties of the three branches of government, which are the legislative, executive, and judicial. Special attention is given to political participation, the rights and responsibilities of citizenship, and government systems of the world. American Government Honors references the view of political institutions to explore the history, organization, and functions of the U.S. government. It offers students learning opportunities that build on one another. A goal of the course is for the student to develop the critical skills of analysis, synthesis, and evaluation in a demanding and thoughtful academic setting. Students are encouraged to use their knowledge of the organizations and management of governing to develop their own views on current political issues. Then, the students are taught how to apply what they have learned into civic action. The course looks closely at the political knowledge and values of the country as it gives students a look into the problems faced by presidents, congressional representatives, and other political activists. It also covers the roles of political parties, interest groups, and the media in shaping the government. The Supreme Court is presented as the voice of reason in the balance of powers. Students are encouraged to perform at higher levels as they analyze historical documents and additional readings, work with a set of facts arranged by theme, become skillful in note taking, and join in student discussions. Students develop and demonstrate their writing skills by preparing extended research-based papers and through participation in community service.



American History A&B

This course covers the discovery, development, and growth of the United States. Major topics include American Indian cultures, European colonization of the Americas, and the causes and effects of the American Revolution. Geographical, economic, and political factors are explored as the key factors in the growth of the United States of America. American History A is a survey of the struggle to build the United States of America from the colonial period to the beginning of the 20th Century. By means of reading, analyzing, and applying historical data, students come to appreciate the forces that shaped the history and character of the American people. Not only are the topics of American history discussed, but students also explore research methods and determine accurate sources of data from the past. Knowing the facts and dates of history are just the beginning. Each student must understand how history affects him or her.

American History B begins with a study of American life before the 1929 stock market crash and how the Roaring Twenties influenced society in the late 19th through early 20th Centuries. Students will examine the causes and consequences of the Great Depression and move on into a detailed study of World War II, with an emphasis on America's role in the conflict. The course continues with an analysis of the Cold War struggle and America's rise as a superpower. The Civil Rights and Women's Rights Movements, pollution and the environment, and American domestic and foreign policy will be examined. The course wraps up with a summary of current events and issues, including a study of the Middle East. This course begins with an assessment of life in United States Pre-World War I and ends with the conflicts of the new millennium. Students look at the nation in terms of economic, social, and political trends. The experiences of the last century are summarized, including a look into the civil rights issues that have embroiled the nation in conflict. The development of the United States of America into a superpower is explored within a global context.

American History A&B Honors

Honors students are expected to complete additional assignments throughout the course that build upon the content provided. These assignments, like a position essay, make these students go above and beyond the curriculum content in creativity and application.

This course covers the discovery, development, and growth of the United States. Major topics include; American Indian cultures, European colonization of the Americas, and the causes and effects of the American Revolution. Geographical, economic, and political factors are explored as key factors in the growth of the United States of America. American History I is a survey of the struggle to build the United States of America from the colonial period to the beginning of the Twentieth Century. By means of reading, analyzing, and applying historical data, students come to appreciate the forces that shaped our history and character as American people. Not only are the topics of American history discussed, but students also explore research methods and determine accurate sources of data from the past. Knowing the facts and dates of history are just the beginning: each student must understand how history affects him or her.

American History B begins with a study of American life between the 1929 Stock Market crash and how the Roaring Twenties influenced society in the late 19th through the early 20th Centuries. Students will examine the causes and consequences of the Great Depression and move on into a detailed study of World War II with an emphasis on America's role in the conflict. The course continues with an analysis of the Cold War struggle and America's rise as a superpower. The Civil Rights and Women's Rights movements, pollution and the environment, and American domestic and foreign policy will be examined. The course wraps up with a summary of current events and issues, including a study of the Middle East. This course begins with an assessment of life in United States Pre-World War I and ends with the conflicts of the new millennium. Students look at the nation in terms of economic, social, and political trends. The experiences of the last century are summarized, including a look into the civil rights issues that have embroiled the nation in conflict. The development of the United States of America into a superpower is explored within a global context. Teacher feedback is provided throughout the semester.

Civics

In this course, students will understand the significance of government, law, and politics. They will examine the United States foundational documents and how they shaped the Unites States government. Students will examine the purposes and functions of federal, state and local government, the justice system, political systems, the environment, and the economy. Learners will evaluate their role and civic responsibility to their families, communities, and country, including voting and being a productive member of society. Students will get to know leaders and influential people that have championed many causes including civil rights and the environment. Learners will also learn proper ways to interact in society such as interpersonal skills and respecting differences in others, including disabilities. Learners will follow a step-by-step approach for successfully completing each lesson, which includes textbook reading, interactive activities, supplemental reading, lecture, video clips, and Power Point presentations to enhance and reinforce learning. Learners receive frequent feedback from teacher and peers through discussions. By the end of the course, students will have a deep understanding of their civic responsibilities as well as the difference one individual can make in society.

Economics

This course introduces the principles and the applications of economics in everyday life. Students develop an understanding of limited resources and compare it with unlimited wants and needs. Students learn how individual and national economic decisions are made to allocate goods and services among competing users. Students apply economic principles to think and problem solve. The study of economics uses the view of economic institutions and policies to explore the history, organization, and functions of the U.S. government in controlling our economy. It offers students learning opportunities that build on one another. A goal of the course is for the student to develop the critical skills of analysis, synthesis, and evaluation in a demanding and thoughtful academic setting. Students are encouraged to use their knowledge of the policies and institutions of economics to develop their own views on current economic and monetary issues. They are taught how to apply what they have learned into personal financial activities. The course looks closely at the economic knowledge and values of the country and gives students a look into the problems faced by presidents and congressional representatives. It also covers the roles of political activists, political parties, interest groups, and the media in shaping the U.S. economy. The Supreme Court is presented as the voice of reason in the balance of powers. Students are encouraged to perform at higher levels as they are presented with historical documents and additional readings, work with a set of facts arranged by theme, become skillful in note-taking, and join in student discussions. Students develop and demonstrate their writing skills by preparing extended research-based papers.

Economics Honors

Economics Honors provides the student with basic knowledge of the history and philosophy of the United States economy and the economic principles that guide our democracy. Students demonstrate problem solving, and their understanding of the processes for economic reasoning, by applying economic principles to decisions they make as consumers, workers, and members of local and larger societies. This, in turn, enables the student to understand the issues and public policies that affect economic, political, and cultural systems. The course focuses on the functions and duties of the three branches of government, which are the legislative, executive, and judicial, as they relate to the economy. Special attention is given to the role of the Federal Reserve System in administering the United States economy.

Ethnic Studies

Ethnic Studies is designed to help students to develop a more complex and nuanced understanding of the human experience as it relates to ethnicity, including the factors that influence individual and collective identity. Early lessons in the course guide students to build a conceptual framework for studying ethnicity and ethnic groups, based on the relationships among identity, ethnicity, race, and nationality. At the beginning of the course, students will analyze how cultural assumptions and biases influence both individual identity and people's perceptions of others. Additionally, lessons about the origins of culture in early civilizations and the ways that humans organized themselves socially as populations increased will provide background knowledge that students need to study ethnicity in the United States.

Later lessons introduce the histories and cultures of specific ethnic groups in the United States and help students understand how identity and experience are sometimes shaped by belonging to these groups. Students will then investigate factors that lead members of different ethnic groups to immigrate to the United States and consider how these groups and their cultures have shaped American society. Students will also analyze the power structures that impact the lived experiences of Americans in various ethnic groups, identifying patterns of oppression and resistance throughout each group's history.

Throughout the course, students are encouraged to identify and appreciate aspects of their own identity as well as the cultures, strengths, achievements, and values of the major ethnic groups in the United States. A key feature of the course is the emphasis given to the perspectives of individuals from historically marginalized groups that are rarely represented in textbooks. The goal is to add these voices to the larger historical narrative so that students can see themselves and all of their classmates as vital parts of the American story.

World Geography and Cultures A&B

The student will be taught to use the basic skills of map reading and development, geographic technology, and the recognition of geographic themes to make sense of the world. The course examines world regions including the nations, people, and cultures of the Americas and Western Europe.

This second-semester course continues to teach the basic skills of map reading and development, the use of geographic technology, and the recognition of geographic themes. The focus examines the world regions, including the nations, people, and cultures of Central Europe and Northern Eurasia, Central and Southwest Asia, South Asia, Africa, East Asia, and the Pacific.

World History A&B

World History begins with a focus on the skills needed to read, understand, and analyze history, also demonstrating how historians and social scientists arrive at their conclusions about human history. Semester A covers the history of civilization from hunter-gatherer societies through the characteristics of the earliest civilizations to the Enlightenment Period in Western Europe. The second half of semester A explores early intellectual, spiritual, and political movements and their impact on interactions among world cultures.

Semester B applies the reading and analytical strategies introduced in semester A to the events and movements that created the modern world. In the second semester, World History emphasizes the effects of the Industrial Revolution and changing attitudes about science and religion, as well as the impact of European colonization. Students are encouraged to make connections between World War I and II, events related to the Cold War, and between 19th Century imperialism and modern independence movements.

World History A&B Honors

Honors students are expected to complete additional assignments throughout the course that build on the content provided. These assignments, like reading and evaluating eyewitness accounts of historical events, make these students go above and beyond the curriculum content in creativity and application.

World History begins with a focus on the skills needed to read, understand, and analyze history, also demonstrating how historians and social scientists arrive at their conclusions about human history. Semester A covers the history of civilization from hunter-gatherer societies through the characteristics of the earliest civilizations to the Enlightenment Period in Western Europe. The second half of semester A explores early intellectual, spiritual, and political movements and their impact on interactions among world cultures.

Semester B applies the reading and analytical strategies introduced in semester A to the events and movements that created the modern world. In the second semester, World History emphasizes the effects of the Industrial Revolution and changing attitudes about science and religion, as well as the impact of European colonization. Students are encouraged to make connections between World War I and II, events related to the Cold War, and between 19th Century imperialism and modern independence movements.

Art & Music

Advanced Drawing

In Advanced Drawing, students will be reviewing basic drawing skills and the elements and principles of design, while exploring deeper how they are used in art. Students will also explore, in-depth, several different types of media and artistic styles in order to define their personal aesthetic and design their own compositions. In each section, students will observe and analyze various artworks to expand their knowledge of art history and develop their personal aesthetic.

All projects in this course will be an original composition by the student. After instruction and research, students will be given prompts and guidelines on how to create each project, but the final outcome will be unique to each person. At the end of the last four modules, students will participate in either a self- or peer-critique. This is to help students learn to analyze their work and grow as an artist from the input of others.

At the end of the course, students will compile and organize their artwork into a digital portfolio and write an artist statement. This can be used as a record of personal accomplishment or as an application to a secondary art program or job.

Art Appreciation

What makes an artwork a masterpiece? Why do artists create art? What is the difference between Rococo and Art Nouveau? In this course, students will discover the answers to these questions and more. Students examine the elements of art and principles of design and explore how artists have used these elements and principles in the creation of art for centuries.

Art History

This Art History course integrates the four components of art study: art production, historical and cultural context, critical process, and aesthetic process. Students will be able to identify and describe art from prehistoric times to modern time. Throughout this course, students will discuss various artworks, research artists, and create documents and presentations demonstrating concepts learned.

Basic Drawing

In Drawing, students will experiment with several different art materials and tools to see what each tool can do best. Students will explore ordinary things around them to become more observant of the structures and meanings of things, which can be seen in their home and community. Student work will be their own study of the forms, textures, movements, and patterns of the things seen every day.

Each project and each lesson is based on the one before it, so lessons should be completed in the order they are given. Directions should be followed exactly regarding which materials, sizes, and subject matter to use for each project. Each lesson will be a study of a new way of drawing. The examples given will show only the method and materials to be used, never the same subject or size as the project assigned.

The examples are never to be copied. An example will only show one way of using the technique described.

By becoming more observant, by experimenting with new materials, and by exploring a variety of methods, students will continue to grow in artistic skill and enjoyment. Beyond fundamental skills are various levels of creativity. Each lesson provides room for expressing the technical skill learned in a unique, creative way.

Beginning Painting

This course introduces students to classical and contemporary painting, techniques, and concepts, with emphasis on the understanding of its formal language and the fundamentals of artistic expression. Painting from still life, landscape, and life models from observation will be geared towards realism. At the same time, various other painting styles could be explored. Color theory, linear perspective, compositional structure, figure/ground relationships, visual perception, spatial concepts, and critical thinking skills will all be emphasized. Students will study and research major painting styles and movements in historical context. The hope is that students will use this global approach to develop a "critical eye" in evaluation of contemporary painting. Acrylic and watercolors are the mediums used in this class. The main emphasis of this course is to encourage and nourish individuality and creativity.





Beginning Piano

Most of us have a desire to express ourselves in music. The piano is the logical medium to turn to because, through it, one can express one's feelings through rhythm, melody, and harmony. Upon completion of this course, learners will identify and describe the development of sounds in music and perform with expression and technical accuracy in individual performances of a varied repertoire of music on a piano. Students will learn about parts of the piano. They will also learn the letter names of the notes used in piano playing and their placement on the keyboard. They will also gain an understanding of basic music theory. Students will then begin playing notes and chords on the piano. They will continue to develop these skills to be able to write and perform final versions of compositions.

Music Appreciation

Students will gain a thorough understanding of music by studying the elements of music, musical instruments, and music history, as well as music advocacy. Students will be introduced to the orchestra and composers from around the world. They will be required to be a composer, performer, instrument inventor, and advocate.

Theater Studies

Have you ever wondered how a play goes from the playwright's mind all the way into a multi-million-dollar Broadway production? In this course, students will learn the whole process. This course provides a thorough introduction to the theater by providing an overview of major topics in theater studies, with a blend of theoretical and practical lessons. In the first half of this course, students will learn about the definitions of theater, theater history, and contemporary theatrical genres. The second of half of the course will guide students through all of the elements of putting on a professional theatrical production. Students will learn about the entire production process, from playwriting through opening night, including elements of technical theater, the rehearsal process, and audience response. Whether the student is an aspiring actor, technician, director, or producer, or even just an avid theater-goer, this course will be of interest.

Advanced Placement

AP Biology A&B

The AP Biology course is a very challenging and time-intensive course designed for students who are interested in pursuing science in college and/or as a career. This course is designed to be the equivalent of a two-semester college level biology course usually taken by biology majors in their freshman year. It provides students with an opportunity to develop a conceptual framework for modern biology, emphasizing applications of biological knowledge and critical thinking to environmental and societal concerns. As a college-level course, students will be held to high expectations and mature responsibilities just like a college freshman. The course focuses on science process skills and application of factual information. As such, students should be self-motivated and be able to work independently and collaboratively to solve science-related problems.

This course is designed to prepare students to be successful on the AP Biology exam. AP exam scores can earn the student college credit for the course. Because the AP Biology exam requires students to hand draw graphs, students are required to use: online graphing tools,. spreadsheet graphing tools (i.e. Excel), and hand drawn graphs to illustrate data.

All instruction is provided for the student either in the course or in the textbook. Instructors provide focused, constructive feedback for each lab or authentic assignment. as well as for each exam. The teacher is available throughout the week, and the student is able to receive one-on-one support and help in whatever capacity they need.

AP Calculus AB A&B

This High School AP Calculus course is designed with the intent for students to incorporate the concepts of all previous math courses and expand upon these concepts with the implementation of limits. Emphasis is placed upon the multi-representational approach to calculus where problems and their solutions are explored and interpreted graphically, numerically, analytically, and verbally. Students will also be required to explain their answers in written form and will be asked to compare their written response to the AP grading rubric and explain why they feel they should receive that grade. Students are required to use graphing calculators with the capabilities ascribed by the College Board: (apcentral.collegeboard.com). These calculators will be used in a variety of ways including multi-representation of equations (graphs and tables) and also for conducting explorations with various functions and how different values change the look of the function.

AP Calculus BC A&B

AP Calculus BC is roughly equivalent to both first and second semester college calculus courses and extends the content learned in AB to different types of equations and introduces the topic of sequences and series. The AP course covers topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.

Students who are enrolled in college level AP Calculus BC are expected to:

- Work with functions represented in multiple ways: graphical, numerical, analytical, or verbal. They should understand the connections among these representations.
- Understand the meaning of the derivative in terms of a rate of change and local linear approximation and use derivatives to solve problems.
- Understand the meaning of the definite integral as a limit of Riemann sums and as the net accumulation of change and use integrals to solve problems.
- Understand the relationship between the derivative and the definite integral as expressed in both parts of the Fundamental Theorem of Calculus.
- Communicate mathematics and explain solutions to problems verbally and in writing.
- Model a written description of a physical situation with a function, a differential equation, or an integral.
- Use technology to solve problems, experiment, interpret results, and support conclusions.
- Determine the reasonableness of solutions, including sign, size, relative accuracy, and units of measurement.
- Develop an appreciation of calculus as a coherent body of knowledge and as a human accomplishment.

AP Chemistry A&B

AP Chemistry is taught at the college level and is designed to prepare students to take the Advanced Placement Examination and to score high enough to earn college credit in those colleges that recognize the examination. College-level textbooks are used. The course will



cover all of the topics in the AP Chemistry course description. These include an introduction to chemistry as the study of change, gases, thermochemistry, quantum theory, chemical bonding, crystals, phase changes, solutions, chemical kinetics, chemical equilibrium, acids and bases, entropy, electrochemistry, nuclear chemistry, metallurgy, alkali and alkaline metals, nonmetallic metals, transition metals, organic chemistry, and synthetic and natural organic polymers.

AP Computer Science A A&B

AP Computer Science A is a year-long introductory, college-level computer science course. In this course, students cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts such as modularity, variables, and control structures.

College-level AP Computer Science is designed to help students prepare to take the Advanced Placement AP Computer Science A Exam ™ administered by the College Board. The Java Programming course teaches students all Java skills required on the AP Computer Science A Exam. While it can be taken standalone with no pre-requisites, this is one of our most advanced courses, and some degree of technical comfort is recommended.

AP Computer Science Principles A&B

This AP Computer Science Principles (CSP) class uses the CompuScholar Computer Science Foundations curriculum as the primary resource. It is taught as a one-year (two-semester) sequence and covers all required topics in the Computer Science Principles course description published by the College Board. The Python language is taught as the basis for programming topics.

Students need to have typical computer usage skills prior to starting this course. Other introductory programming courses are not required. All required concepts are taught from the ground-up in a fun, step-by-step manner. The course includes uses a variety of multimedia content such as full-color, interactive text, narrated instructional videos, and guided exercises. Strong emphasis is placed on handson programming labs to demonstrate mastery of lesson concepts.

This course is fully aligned with the AP Computer Science Principles Course and Exam description. This allows teachers to easily leverage the additional material and practice questions in the AP classroom.

AP English Language and Composition A&B

This course helps students prepare to take the Advanced Placement Language and Composition Exam [™] administered by the College Board. The first semester focuses on the concepts and skills needed to analyze argumentative texts and to build solid arguments—starting with the choices that experienced authors make when they write to persuade an audience. Students learn and apply best practices for constructing, revising, and refining their own arguments. Writing assignments in semester A include

rhetorical analyses of straightforward written arguments as well as satirical texts and visual approaches to persuasion. Students will be asked to develop several formal argumentative essays and also to practice new skills by writing less formal journal entries throughout the semester. The pace and level of work required by this course is similar to that required in a college-level composition course, so students should be prepared to work independently and to complete all assignments in a way that makes good use of their time.

The second semester of AP English Language and Composition focuses on writing tasks that require synthesis and documentation. Students will analyze many examples of synthesis essays and apply what they learn as they create their own texts based on multiple sources. They will also take a closer look at the use of visual and multi-modal or multimedia evidence when used as support for an argument, and they'll consider how to incorporate these unique approaches into their own attempts at persuasion. Semester B will ask students to work toward improving and refining the style with which they deliver arguments, including the use of rhetorical devices, varied syntax, and grammatical concepts essential to academic discourse. Writing assignments in semester B include the analysis and construction of multimedia arguments, studies in style, and research-based projects that require the synthesis of information and ideas. As in semester A, the pace and level of work required by this course is advanced and substantial, so students should be prepared to work independently and thoroughly on all assignments.

AP English Literature A&B

Both semesters of online AP English Literature and Composition have been designed to challenge students to read and interpret a wide range of literary works. This course allows students to explore a variety of genres and literary periods and to write clearly about the literature that they encounter. By the end of the second semester, the student will be well prepared for the AP Examination and will have acquired analytical skills that will be used throughout life. The first semester of this course focuses on the elements of fiction. The student will spend a considerable amount of time reading and analyzing a variety of short stories and novels. The student will evaluate how the elements of plot analysis, characterization, theme, point of view, symbolism, allegory, irony, and humor work together to create a story or novel that is worthy of literary acclaim. In addition to reading, the student will complete a wide variety of writing pieces in order to develop better writing skills in the following areas: narrative, exploratory, expository, and argumentative.

AP European History A&B

This AP study of European history since 1300 introduces students to economic, cultural, social and political developments. These developments played a fundamental role in shaping the world in which they live.

The second semester of online AP European History will introduce students to the birth of modern political thought, the Great Depression, and World War II. They will study the Cold War and the collapse of communism and wrap up with the dawn of the 21st Century. Students will complete a project at the end of each unit with the final project being a critical analysis.

AP Physics 1 A&B

AP Physics 1 is a rigorous full-year course divided into two semesters. Semester A focuses on kinematics, Newton law of motion, forces, work, energy, power, and momentum. Semester B expands these topics while focusing on torque, inertia, angular momentum, oscillations, and fluids. Throughout this course, students will gain knowledge, skills, and understanding of the key physics principles, as well as gain preparation for taking the AP Physics 1 exam.

AP Psychology A&B

This course will be utilized for students wishing to take the AP Pyschology exam. All modules in this course are geared towards a content area covered on the AP exam. The course begins with an introduction to the origins of psychology to strengthen students' scientific foundations that other modules will build upon. The first module also includes an introduction to AP courses. The semester then focuses on biology with an emphasis on the brain. With having a strong grasp of neuropsychology, students will then expand their knowledge to learning about cognitive and developmental pyschology.

AP Spanish Language and Culture A&B

In AP Spanish Language and Culture, students will use the three modes of communication – interpretive, interpersonal, and presentational— as defined by the World Readiness Standards for Learning Languages. Using the ACTFL Performance Descriptors for Language Learners, students will be provided opportunities to demonstrate their proficiency in each of the three modes. Each module is theme-based, providing ample opportunities to interpret written, print, visual, audiovisual, and audio text; speak with and write to others; and present by speaking and writing for an audience.

Themes in semester A include families and communities, education and careers, entertainment and travel, global citizenship and human geography, lifestyle and traditions, social awareness, historical figures, and ethnic identity.

In order to demonstrate all three modes of communication, students will engage with their instructor and students in collaborative discussions, personal opinion and persuasive essays, interpretation activities, and oral and audiovisual presentations. In both semesters, students will encounter similar tasks as found on the AP Exam, but by semester B, the difficulty and complexity will have increased to match the exam's expectations.

Themes in Semester B include technology, healthcare and medicine, architecture, beauty and creativity, personal beliefs and interests, fashion, design, literature and the arts, science and ethics, economics, philosophy, and religion.

AP Statistics A&B

This High School AP Statistics course is a preparatory AP course that introduces students to selecting statistical methods, analyzing data, using simulations and probability, and statistical argumentation. In semester A, students will explore:

- One-variable data
- Two-variable data
- Collecting data
- Probability
- Modeling probability
- Sample proportions and the Central Limit Theorem.

In semester B, students will explore:

- Hypothesis testing for proportions
- Testing two proportions
- Hypothesis testing for means
- Testing two means and matched pairs
- Chi-Square testing
- Inferences about slopes

Students will be required to answer questions using proper language associated with the AP Statistics Exam. Students are required to use graphing calculators. This course will demonstrate the use of a TI-84 calculator in preparation for the AP Exam.

AP United States Government and Politics A&B

This course examines the U.S. political system. Students in this course will discuss political ideology, the development of the political system, and democratic institutions. Students should, according to the College Board, gain an "analytical perspective on government and politics in the United States." Furthermore, students will study "both the general concepts used to interpret U.S. politics and the analysis of specific examples" throughout history. The class discussion will require that students acquire a "familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. politics." The main emphasis of the course, however, is to be able to apply a basic comprehension of the U.S. political system to contemporary events.

AP United States History A&B

AP United States History is an intensive, full-year course divided into two semesters. The course focuses on exploring and analyzing American historical events, individuals, and cultural trends. Students will be prepared with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States History. This first semester course covers the time frame of 1492 to 1877, and the second semester course covers the time frame 1878 to present.

This course is designed to prepare students for the Advanced Placement Exam in United States History that is administered by the College Board Educational testing center. The class satisfies the United States History requirement for graduation.

AP World History Modern A&B

The first semester of AP World History Modern delves into the history of mankind. Looking back to the prehistoric times, students will develop the connections between the early river valleys, the beginnings of civilizations, and governments. Through this semester, students will be introduced to concepts that will be placed on the AP Examination and will also be given multiple opportunities to practice skills necessary for the AP Exam. This specific time will start from the First Agricultural Revolution to the Age of Exploration.

The second semester of this course is a continuation of Semester A, starting with how Europe evolved from the colonies being brought into the New World. This course will continue to make connections between nations and look at the big picture concepts of the world until present day. This semester will also spend one time preparing specifically for the AP Exam. Through review materials and practicing skills needed for the AP Exam, students will work on being prepared for the exam.





French 1 A&B

French 1 focuses on developing listening skills by repeated exposure to the spoken language. Speaking skills are encouraged through recommended assignments using voice tools. Reading and writing skills, as well as language structures, are practiced through meaningful, real-life contexts. The use of technology enhances and reinforces authentic language development and fosters cultural understandings through exposure to native speakers and their daily routines.

French 2 A&B

French 2 Semester A contains 6 (six) modules. Each module contains 10 (ten) lessons. The purpose of the French 2 course is to further students' language acquisition and to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where French is spoken.

This course is based on the ACTFL standards and provides students with opportunities to expand their listening, speaking, reading, and writing skills as they create with the language and access various materials on generally familiar topics. Students identify the main idea(s) and details in texts, dialogues, and videos within a cultural context. They read and interpret authentic materials. They read, speak, write, and listen to short, cohesive passages in present, past, and future time. Students extend their knowledge and understanding of their target language and culture(s). They learn the interrelationship of other cultures to their own, by identifying behaviors appropriate in target cultures.

Semester B continues the enhancement of language skills. Vocabulary and grammar structures are revisited and expanded as students explore other French-speaking areas. Speaking and listening skills are enhanced through recommended real-life voice activities. Listening skills are honed through online dialogues. Reading and writing skills are developed through access to completion of meaningful activities related to travel, the Olympics, natural disasters, and the space program. Reading of culturally related articles of interest and responding to reading in the target language, along with the use of technology, reinforces authentic language development and fosters cultural understandings through exposure to native speakers and their daily routines.

French 3 A&B

French 3 Semester A contains six modules. Each module contains ten lessons. The purpose of the French 3 course is to further students' language acquisition and to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where French is spoken.

This course is based on the ACTFL standards and provides students with opportunities to expand their listening, speaking, reading, and writing skills as they create with the language and access various materials on generally familiar topics.

Students identify the main idea(s) and details in texts, dialogues, and videos within a cultural context. They read and interpret authentic materials. They read, speak, write, and listen to short, cohesive passages in the present, past, and future times.

Students extend their knowledge and understanding of the target language and culture(s). They learn the interrelationship of other cultures to their own, by identifying behaviors appropriate in target cultures.

German 1 A&B

In the German 1A course, students will be introduced to various common situations that require communication. They will learn how to exchange names and greetings, describe people based on physical and personality traits, and talk about family members and aspects of their social life. Throughout the course, students will start with basic sentence structures and grammatical tools, enabling them to communicate in German through listening, speaking, reading, and writing. They will also internalize new vocabulary and grammar. In addition, students will have the opportunity to learn about different regions of the German-speaking world visited by the central characters in each unit. This will provide them with cultural insights and context related to the language they are learning.

In German 1B, students will be introduced to several common situations in which they will learn how to ask for food, talk about family members, describe their town and urban

transportation, discuss various seasons and associated weather conditions, and talk about food, clothing, and activities. They will also explore various art forms, such as plays, concerts, and movies. Additionally, students will have discussions about health and well-being, as well as travel and tourism. Throughout the course, students will build upon what they have learned in German 1A to enhance their listening, speaking, reading, and writing skills in German, while internalizing new vocabulary and grammar. They will also gain insights into different regions of the German-speaking world. By doing so, students will lay a solid foundation for further learning as they progress in their German studies, acquiring both language proficiency and cultural understanding.

German 2 A&B

In this course, students build on grammar and language skills that they acquired during their German 1 A and German 1 B courses. While reviewing basic grammar skills in present and past tense, students learn and study stem-changing verb conjugation and explore cultural themes regarding current events, famous German people, music, and famous festivals.

In the second semester course, students increase their proficiency in being able to communicate by forming more complex German sentences in a variety of tenses using all four cases (Nominative, Accusative, Dative, and Genitive). The variety of topics increases also, from exploring different careers to discussing relationships. Cultural themes are entwined throughout this course related to going shopping, going to the zoo, and traveling throughout the German-speaking world.

Spanish 1 A&B

Spanish 1 is designed to develop an authentic and practical understanding of the Spanish language and culture. Students will have the ability to express their thoughts, feelings, and opinions in the target language within basic, real-life situations and learning scenarios. All new concepts, grammatical concepts, and cultural information will be introduced in context while incorporating various listening, speaking, and writing activities.

Spanish 2 A&B

Students build upon the foundation developed in Spanish 1. They continue to build vocabulary, learn new verb tenses and other grammar concepts, and they increase their ability to communicate with others. They learn new concepts, like reflexive verbs, infinitive expressions, commands, and the imperfect tense. Semester B will continue building on vocabulary, grammar concepts and communicating effectively in the target language. Students will explore new countries where Spanish is spoken and continue to keep abreast of current events in the Spanish-speaking world.

Spanish 3 A&B

Students continue to develop their ability in reading, writing, speaking, and understanding Spanish through a systematic review of its structure. Students focus on applying vocabulary in a wider array of situations by learning about the past progressive, and subjunctive moods and the present perfect, future, and conditional tenses.

Health & PE

First Aid

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: Living Your Best Life

Students begin the course by exploring the different dimensions of good health and ways they can take charge of managing their health. The semester continues with a focus on good nutrition and safe food preparation and handling. Then, students take an in-depth look at the elements of physical fitness and its importance across the lifespan. A discussion of infectious and noninfectious diseases follows, with an emphasis on preventing disease. Students then investigate substance use and abuse, their effects on health, and ways to avoid or quit using. The course concludes with a focus on community and environmental health along with safety in the home, school, and community. A minimum grade level of 9th grade is suggested.

Health: Mental Health & Well-Being

Students begin by exploring the different dimensions of healthy intra-and interpersonal relationships. They next examine stress and the importance of learning to manage it. Next, students are introduced to the concept of neurodiversity and some of the characteristics of neurodiverse people. A discussion of mental health, mental illness, and suicide prevention follows. Students then explore the short-and long-term effects of violence on health

and look at ways to prevent or reduce violence. The semester concludes with an overview of end-of-life care, death and dying, and the grieving process. A minimum grade level of 9th grade is suggested.

Health: Sexuality and Gender

This course begins with a discussion of human development, concepts related to gender and sex and a brief introduction to human sexuality. Students then explore the anatomy and physiology of the male and female reproductive systems and of human reproduction. Next, students investigate evidence-based information about abstinence and contraception. A discussion of sexually transmitted infections and their prevention and treatment/management follows. Students examine the changes that occur in the mother and fetus throughout pregnancy. The course ends with a basic introduction to childbirth and a discussion of parenting and other choices available to teenage parents. A minimum grade level of 9th grade is suggested.

Individual and Team Sports

To improve and maintain optimum health, it is necessary for people of all ages to participate in physical exercise. There is little doubt that, in addition to students in schools, the number of adults participating in sports and recreational activities in the United States has increased in recent years. Physical education is much more than just fitness and exercise. A well-planned program will cause students to think and express their emotions about different situations.



In addition, a good program can make a valuable contribution to a student's education. These experiences will help students develop a sense of wellness. Emphasis in this course is placed on the value of these sports as possible lifetime activities and on creating a clear explanation of the rules and basic principles of a variety of sports. The sports covered in this course are archery, bicycling, golf, skiing, tennis, volleyball, baseball, basketball, football, hockey, and soccer. Information about the playing area and equipment, basic rules, safety considerations, and terminology for each sport are included in the discussions. For the most part, the information presented in each lesson applies to sports programs throughout most sections of the United States.

Nutrition

This course takes students through a comprehensive study of nutritional principles and guidelines. Students will learn about world-wide views of nutrition, nutrient requirements, physiological processes, food labeling, healthy weight management, diet related diseases, food handling, nutrition for different populations, and more. Students will gain important knowledge and skills to aid them in attaining and maintaining a healthy and nutritious lifestyle.

Personal Fitness

Personal Fitness is a one-semester course that will introduce the concepts of exercise and its benefits. Topics ranger from how exercise impacts well-being and physical health, to learning the body systems that play a major role in a person's ability to participate in that exercise. As students progress, they will encounter critical thinking questions that help them apply new knowledge to their own lives.

Physical Education A&B

Physical Education encompasses learning how to live and maintain a healthy lifestyle. This course covers physical fitness, why it is important, how to have a healthy attitude, and how to stick with a healthy game plan. In this ever-changing world, physical fitness becomes more important and yet more difficult for which to make time. This course allows the student to discover how to make physical fitness not only a part of their daily life, but also see that it is attainable. This course leads the student to discover healthy behaviors and sets the tone for physical fitness as well as healthy exercise. P.E. for a healthy lifestyle will examine the emotional, physical, and scientific factors that influence physical performance. This course is designed for anyone, ranging from beginner to advanced abilities.

Additional Electives

Character Education

This course teaches students practical skills for understanding and managing their emotions, setting goals and getting organized, understanding and getting along with others in our diverse world, and making good decisions. Research shows that people who practice these skills have greater academic achievement as students and experience more success and satisfaction as adults.

Child Development

In this course, students will learn about childcare development and the caring of children. Students who work as a babysitter, a camp counselor, or at a daycare would benefit from the material presented. Topics covered include prenatal development through pre-adolescence and physical, emotional, intellectual, and social development. Also included is a module on health and safety issues.

Personal Leadership

Personal leadership skills are an important tool we use to build relationship and communication skills. Upon completion of this course, learners will be able to identify their own emotions, thoughts, and values and how they influence behavior. They will describe social skills needed for healthy and supportive relationships. They will also explain healthy and responsible decision making at school, work, and home. Learners will also identify and understand the perspectives of and empathize with others, including those from diverse backgrounds, cultures, and contexts.

Psychology A&B

In Psychology A, the student begins with a brief history of psychologists and their experimental methods. Next, they examine personality theories. Then, human development from the infant stage through adult stage is explored. Finally, the last part of the course is about consciousness: sleep, dreams, and conscious-altering substances. Students are encouraged to increase their own self-awareness as they move through the course.

In Pyschology B, students continue to learn about psychology. Students examine the nature of intelligence in humans and animals, including the origin of intelligence and how to measure it. They learn about learning with an emphasis on classical and operant conditioning. Students also investigate social psychology and psychological disorders. They demonstrate their understanding by completing projects in which they play roles like teacher, parent, and psychologist.

Sociology

Sociology examines the basics of sociology, which is the study of society including individuals, human groups, and organizations. The course is divided into four main areas: the sociological perspective, social structures, inequality in society, and social institutions and change. Students will examine controversies around social change, inequality, gender, and race. The course revolves around an overview of the field with projects that offer the student a chance to explore from a sociologist's perspective.

Study Skills and Strategies

The Study Skills and Strategies course equips students with skills and understandings critical to effective learning. Using a unique approach to the traditional topic of study skills, this course weaves understanding regarding the role of the brain in learning into the instruction of discrete learning skills and strategies. Moving beyond a list of good tips and ideas, the Study Skills and Strategies course will challenge students to develop intentional approaches to learning. They will be required to make connections between the strategies and skills they learn in this course and the implementation of those strategies and skills in their other coursework. Upon completion of the course, students will have learned a variety of specific learning skills and strategies, gained greater understanding of their own learning preferences, and become prepared to develop and implement specific learning and study plans for any academic course or other learning needs.



Career & Technology Electives

Accounting

In this semester of our online Accounting course, students will explore accounting, including investigating accounting careers. Students will learn basic accounting skills and procedures, both with and without a computer, for general journals, general ledgers, cash payments journals, cash receipts journals, sales journals, accounts payable ledgers, and accounts receivable ledgers. Students will also learn how to reconcile a bank statement and to prepare payroll records. This course covers the basic principles of financial accounting for individuals and for companies with attention to both the mathematical formulas and to the ethical side of accounting. Each unit has practical exercises including a project at the end of the unit.

Adobe After Effects

In this course, students will explore the comprehensive Adobe After Effects software. Adobe After Effects is the industry standard for making motion graphics and special effects for presentations, internet content, and video. Both Windows and Mac OS systems can run After Effects, so students will uncover the nuances of working with each. The modules in the course will take students through the creation of a project, from defining the audience to organization to publishing their creations. This course prepares students to take the Adobe Certified Professional Certification for Adobe After Effects Exam.

Adobe Illustrator

This course introduces students to Adobe Illustrator and prepares students to take the Adobe Certified Associate Certification Exam on Illustrator. Students will get an insight into what it is like working in the graphic design industry. Students will learn everything from absolute basics like navigating Illustrator to performing complex tasks like managing colors, drawing, creating illustrations, and much more. The course contains guided video tutorials, hands-on projects, and step-by-step resources that help students learn how to work in Illustrator. This course prepares students to take the Adobe Certified Professional in Graphic Design & Illustration Certification Exam.

Adobe InDesign

This course introduces students to the world of Adobe InDesign. Students will get an insight into what it is like working in the print and digital media publishing industry. Students will learn everything from absolute basics, like navigating InDesign, to performing complex tasks like creating multi-page documents, applying effects, and even creating original artwork. The course contains guided tutorials, do-it-yourself projects, and great resources that will help students practice and learn how to work in InDesign. This course prepares students for the Adobe Certified Professional in Print & Digital Media Publication Certification Exam.

Adobe Photoshop

This course introduces students to the world of Adobe Photoshop. Students will get an insight into what it is like working in the visual and graphic design industry. Students will learn everything from absolute basics, like navigating Photoshop, to performing complex tasks like editing and retouching photos, applying filters and effects, and even creating original artwork. The course contains guided tutorials, do-it-yourself projects, and great resources that will help students practice and learn how to work in Photoshop. This course prepares students for the Adobe Certified Professional Certification for Adobe Photoshop Exam.

Adobe Premiere Pro

This course introduces students to the world of Adobe Premiere Pro. Students will get an insight into the video design and production industry. Students will progress from absolute basics, like navigation, to performing complex tasks like editing videos, applying filters and effects, and even creating original artwork. The online Adobe Premiere Pro course contains guided tutorials, engaging projects, and great resources that will help students practice and learn how to work in Premiere Pro. This course prepares students to take the Adobe Certified Associate Certification Exam on Premiere Pro Exam.

Aeronautics and Space Travel

This course introduces students to the history and near future of space travel. Students will explore the possibilities of moon bases, Mars colonies, and visiting the outer planets in our solar system and their moons. Students will also discuss important ethical and legal issues around space exploration, such as asteroid mining and war in space. The course gives an expansive view of the technologies, science, and theories that will make far-fetched dreams into realities during the student's lifetime.

Aariscience I

This course will prepare students for careers in agriscience. Agriculture is the world's largest industry, so the critical nature of understanding how agriculture must thrive in unpredictable conditions cannot be overstated. Throughout the modules, students will gain an understanding of some of the fundamental issues in

agriscience, including safety, environmental factors such as climate change and extreme-weather conditions, plant and animal science, and food safety. Additionally, students will explore how they can emerge as leaders in such a complex and exciting industry.

Agriscience II

In this course, students will explore the various components of agriscience careers and agricultural living. Beginning with career exploration, students will become familiar with the vast array of opportunities that exist in agriscience. They will discover what is necessary for the proper care and management of livestock, from keeping living guarters clean to caring for newborn animals. Students will understand the ways in which plants, crops, and vegetation thrive in varying conditions. They will explore the fundamentals of running a successful agriscience operation as well as how agriscience affects and is affected by global economic conditions.

Agriscience III

This course further delves into agriscience as a core global business. Students will explore fundamental business operations and structures, as well as financial considerations. Students will understand the nutritional needs of livestock in order for them to be free from disease and be able to thrive in good health. Plants are heavily dependent on proper fertilization, irrigation, and nutrition to prosper. Thus, students will take a comprehensive look at the systems necessary to produce bountiful crops. The course will be rounded out learning about the tools and techniques needed to run an agriscience business and harvest crops.

Architectural Design I

In Architectural Design I, students will review various concepts used in the design and architecture field. They will learn about basic drafting equipment and how to use and maintain it. They will analyze challenges and solutions within the development of design. They will also learn how to prepare drawings manually and using AutoCAD software. A substantial portion of the course will be spent on sequential processes so that students develop an understanding of creating and annotating drawings, as well as how to apply standard rules regarding line types, offset objects, creating layers, and setting up a page for plotting. They will also explore three-dimensional drawing and use coordinating and navigation systems to create them.

Architectural Design II

The Architectral Design II course provides specific methodologies used within the field of architecture as well as creative ways to think about and solve design challenges. Students will complete work using AutoCAD software aligned with objectives on the Autodesk Certified User (CAD) Certification Exam, including basic drawing skills, modifying objects, annotating drawings, using layouts and printing, and applying accurate skills in dimensioning and scale. In later modules, students will study the built environment by learning about pioneers of architecture and engineering, architectural and engineering design feats, and how architecture and design is and will continue to be influenced by innovative technology. The course prepares students for the Autodesk® Certified User in Auto-CAD Certification Exam.

Architectural Design III

The focus of Architectural Design III course is to identify the common sequential processes used in computer-aided drafting (CAD). These processes will provide students with the foundation of creating drawings in CAD software including the use of lines, circles, arcs, text, varied text styles, multi-leaders, dimensions, dimension styles, crosshatching, object property commands, arrays, reference angles, layers, page setup, reusable content, and gradient patterns. Students will also explore concepts of ethics and legal responsibilities. They will identify how policies and procedures are used to develop company culture and professional standards. Students will have the opportunity to investigate career opportunities in the drafting professions. They will learn about the importance of developing a digital portfolio from their academic and professional experience. The course will culminate with a project that utilizes the processes they've learned in their readings.

Augmented and Virtual Reality Applications

Separating hype from reality is hard, especially in the fast-growing and evolving space of augmented and virtual reality (AR/VR). Recent advances in technology has allowed AR/VR systems to become extremely sophisticated and realistic. This course introduces students to the technologies that underpin AR/VR systems. Then, the course walks through seven applications of AR/VR and how they will change and impact numerous aspects of our lives and the economy. Students will also learn about and discuss the risks and side effects of these systems, including health, privacy, and ethical implications.

Basic Web Design

In this course, students will learn how to design a beautiful and functional website. Students will learn how to take their design and translate it into a live website using Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS) programing languages. HTML5 and CSS3 will be the standard versions used in the class. Students will understand design components of websites, including the use of color, layout, when to use different techniques, typography rules, and the importance of imagery. At the conclusion of the course, students will present a website to the class. Upon completion of this course, each student will have hands-on experience creating a fully functioning website. Students do not need to have a previous technical background with HTML or CSS prior to taking this course.

Building Maintenance Technologies A&B

The online Building Maintenance Technology course will focus on all aspects of the construction industry, from health and safety to the tools that every construction professional needs in their collection. They will learn about the various roles in the industry, as well as job outlooks, educational and experiential requirements, and salary information. Some activities will focus on career exploration to discover career

options that best align with interests and talents. Students will learn basic construction math and how it is applied during design and building phases of projects. They will learn specifics about carpentry, construction drawings, framing floor systems, framing walls, and framing roofs. Throughout, they will establish a foundation for what opportunities exist for them in the industry.

Semester B of the Building Maintenance Technology II course examines the multi-faceted construction industry. Students will explore contract documents and how each is pertinent to establishing business relationships with designers, clients, and other stakeholders. They will identify what goes into building a successful contract and how estimates, costs, and timeframes are estimated and calculated. Drafting techniques using CAD and BIM technology will also be discussed, specifically pertaining to how these technologies have transformed the building industry. Severla logistical components like zoning, property lines, property setbacks, site elevations, calculating materials and labor costs, and establishing construction schedules are critical to the building process. Student will discover the impact of the built environment on the natural environment and how it has evolved over many years. Finally, students will learn about issues related to sustainability and creating more environmentally-friendly practices, procurement, and techniques in the construction industry. This course prepares students for the OSHA 30-hour Construction Certification.

Business Law

Students learn about the American legal system. They examine ethics, court systems, criminal law, and law of torts. They examine how the court systems work together and what misconduct results in going to court. It is important for students to also understand consumer rights. As they progress through the course, they will also gain an understanding from a business perspective what are right and wrong business actions and employment laws. As an employee or employer, it is important to understand the laws that protect the employee and employer. The study will focus on the formation of a business and the basic legal issues associated with each type of business.

Career Exploration in Dentistry

This course introduces students to the exciting and varied career opportunities in the dentistry profession, from dental assistant all the way up through oral surgeon. Students will review the history of dentistry globally and in the U.S. and will learn key dental terminology. The course will introduce the roles and tasks done as well as skills and education required of nearly every member of the dental staff. Students will gain an understanding of what it takes to perform each position and how they work together.

Career Exploration in Finance

This course introduces students to the challenging and lucrative world of finance. While Wall Street may still get a bad rap after the 2008 financial crisis, finance careers still remain highly sought after and can be highly rewarding. The course reviews key financial terms and examines various groups,

positions, and roles within financial institutions. Students will learn about resumes, interviews, and networking. Students will also discuss ethics on Wall Street and the role of finance within society.

Career Exploration in Healthcare

This course introduces students to the exciting and varied career opportunities in the healthcare industry that will be in demand in their future. The course will introduce the roles and tasks, identify education and skills needed, identify responsibilities of roles which support or supervise their role, analyze legal and ethical responsibilities, limitations, and implications for each of these professions.

Career Planning

The online Career Planning course guides students through the essential elements of the career planning process and the development of a defined career plan. Students will consider the many factors that impact career success and satisfaction. Using a process of investigation, research, and self-discovery, students will acquire the understandings critical to the career planning process. Upon completion of the course, students will have created a practical and comprehensive college or career transition portfolio that reflects their skills and abilities, as well as their interests, values, and goals.

Cloud Technologies and the Internet of Things

First, we had the internet of computers. Then with the advent of email and social media, along with mobile technology, it became the internet of people. Today's world is increasingly becoming the internet of things. With advances in battery power, sensors, and computer chips, more and more devices are being connected to the internet. This will allow them to be monitored, controlled, and used more effectively for people and businesses. This course will examine the trends and opportunities surrounding the Internet of Things (IoT). Students will learn about the technologies, hardware, and software that underpin the Internet of Things. The course will examine a variety of end-market applications in our homes, businesses and cities. Finally, students will learn about the many career opportunities that the Internet of Things will enable.

Computer Basics

In this online Computer Basics course, students will learn how to use productivity and collaboration tools, such as G Suite by Google Cloud, to create word processing documents, spreadsheets, surveys, and forms, such as personal budgets and invitations.

Construction: Fundamentals and Careers

This online Construction Fundamentals course introduces students to some of the foundational elements of home construction and then does a deep dive into careers, technology, and the future of home construction. It also addresses some of the academic proficiencies that different careers in the field of home construction will need. Later in the course, specific careers, career outlooks, and specialized education and training requirements will be covered. Students will discover the varied roles within the field as well as what it takes to own

a construction company. Finally, the course delves into green construction and where the future of construction is headed.

Cybersecurity

In the online Cybersecurity course, students will learn about the practice of protecting networks, systems, and programs from digital attacks. They will better understand the aim of these attacks, such as destroying information, extorting money and resources, or disrupting business operations. They will learn about the challenges and opportunities that implementing cybersecurity measures can present. As attackers become more innovative, it is more important than ever to have effective cybersecurity channels in place to counter them. Students will learn about countermeasures, role recovery, and their integral function in the cybersecurity realm. Additionally, students will learn what makes certain networks and systems more vulnerable to attacks. They will become adept at identifying potential viruses, worms, threats, and malware. The Cybersecurity course acts as a foundation on which to build extensive knowledge about threats to digital security.

Digital Media

Digital Media is a project-based survey of different forms of digital media, such as digital audio, imaging and illustration, movie editing, and animation. It's oriented toward teaching broad, flexible tools and concepts that are not tied to any one platform or program. Each module ends with a culminating task, like a podcast or short film, and students will be able to draft and develop their projects as they build their skills over each lesson.

Digital Savvy A&B

Digital Savvy is a one-year, two-semester course covering required topics in most introductory Information Technology classes. Students should have minimal computer usage skills (e.g. keyboarding, mouse, and operating system navigation) prior to starting this course.

The course material is designed to appeal to a variety of students, from traditional learners who thrive on written text to audio-visual students who enjoy a multi-media format. All content is delivered through an online system that allows students to work seamlessly both in the classroom and at home. Every chapter contains one or more hands-on activities that allow students to practice and demonstrate understanding of the lesson topics. A Windows or Mac OS computer is required for completion of the hands-on activities.

Drones: Remote Pilot

This course prepares students to take the Federal Aviation Administration's Part A Exam, which is a key step to becoming a commercial drone pilot. The field of unmanned aerial vehicles is growing rapidly as the opportunities to use them for search and rescue, photography, recreation, inspection, and many others continue to multiply. Students will learn the critical facts to prepare for the test's topics, which include regulations, airspace and requirements, weather, loading and performance, and operations. The course will conclude with a look at the most promising careers in the field of drones.

Early Childhood Education I and II

The Early Childhood Education course is designed to provide an overview of the expectations and roles of the early child hood educator. The course provides details about childhood development, health, nutrition, and guidance strategies to help students understand the exciting and unique opportunities that a career in early childhood education can offer. The course is intended to prepare students for challenges they may face and to emphasize the rewards of being able to influence the life of a young child. The ability to offer support to children as they learn and grow is a point that is highlighted throughout each lesson.

Early Childhood Education II is designed to provide an overview of the professional expectations of being an early childhood educator. Throughout the course, students will learn what it means to be a professional, including the significance of professional development in any educational role. They will review observational methods and the history of education in the United States, with a focus on early childhood and school-age programs. They will spend a significant portion of the course learning about the importance of Developmentally Appropriate Practice and how to implement DAP strategies. Designing physical, social, and temporal environments will also be a major focus of the course, as will developing relationships with families and communities to strengthen their position and knowledge.

This course prepares students for the Child Development Associate (CDA). Certification requires that students take both Early Childhood Education I and Early Childhood Education II. These courses prepare students for the preapplication phase of 120 hours of instruction in the core areas of focus.

Education & Teaching Advanced

This course is designed to prepare future educators for the classroom they will inherit. It starts with a history of education and how blended, adaptive, and personalized learning are coming to the forefront in learning. It then explores new and emerging technologies, along with their current and future impact on education. Throughout the course, students will explore a wide range of career possibilities in the education field and evaluate both the promises and pitfalls of technology in education.

Entrepreneurship & Small Business

This course will prepare students for certification in Entrepreneurship and Small Business. The modules are designed to cover all aspects of entrepreneurship including traits of successful entrepreneurs, business management, hiring employees, creating a company culture, managing finances, and marketing products and services. Each module will challenge students to put themselves in the role of an entrepreneur and consider how they will handle the extensive responsibilities of starting a business.

Financial Literacy

This course is designed to equip students with essential financial skills and knowledge. It covers fundamental money principles, including budgeting, managing a checkbook, and

organizing financial paperwork. Students will learn effective strategies for handling credit and debt, becoming wise consumers, and understanding the impact of money on relationships and lifestyle choices. The course also explores financial considerations for major life events such as school, marriage, homeownership, and raising children. Additionally, it emphasizes the importance of planning ahead for retirement. By the end of the course, students will be prepared to make informed financial decisions and manage their money responsibly.

Fundamentals of Bitcoin & Cryptocurrency

In this course, students will learn all about bitcoin, including its history, development, and context within the modern global economy. Students will learn the basic cryptographic principles that underlie bitcoin and gain confidence by demonstrating strong security principles in storing and transacting bitcoin. Key principles such as mining, wallets, and hashing will be introduced. Finally, they will be familiarized with the nascent industry of digital currencies and how they function.

Fundamentals of Blockchain & Cryptography

Blockchain seems to be the latest buzzword that the business world is taking about. But what is it? And why should a high school student care? This course will seek to answer those questions. It will strip away the layers of complexity and sophistication to help students understand the key concepts of the blockchain. The course will introduce and discuss applications where blockchain has the greatest potential.

Graphic Design

Graphic Design is an introduction to elements of design, spatial relationships, typography and imagery as they apply to practical visual solutions for self-promotion, resumes, logo design, web design, and sequential systems. In this course, the student explores the basic foundations of design through a series of visual projects that explore the principles and elements of design. Students will work both with analog and digital media as they explore two-dimensional and three-dimensional design along with color theory. This course will help develop and explore a student's ability to communicate visually.

In each lesson, students acquire new skills, which take some effort. Beyond fundamental skills are various levels of creativity. Each lesson provides room for a student to express the technical skill learned in his or her own creative way.

Health Careers

In this course, students explore a variety of career options related to the healthcare field, including medicine, nursing, physical therapy, pharmacy, dental careers, child care, 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.

Healthcare Management & Information Systems

In this course, students will explore the comprehensive world of healthcare information and management. Throughout the

modules, students will learn about the history of the healthcare system as well as the current best practices in the field. They will explore the innovative technologies being developed and applied in patient care and patient privacy. Students will become familiar with the specific terminology utilized within the clinical and information technology systems. Students will investigate the complexities of the business of healthcare including data organization and security considerations. Finally, students will identify the ways in which communication and leadership go hand-in-hand with a thriving career in healthcare information and management systems.

History of Gaming and Esports

In this course, students will learn about the technologies and design principles that have been the foundation of the development of video game technology over the last 50 years. Students will examine and discuss the impact of video games on culture and the economy. Students will learn about the current gaming and e-sports landscape, including strategies and techniques of top teams and individuals. This course will also discuss the risks and dangers of video games and understand how to set appropriate time and content parameters. Finally, the course will identify career paths and opportunities for those who are passionate about gaming.

Intro to Artificial Intelligence

This course teaches what every student should know about Artificial Intelligence. Al is a fast-moving technology with impacts and implications for both our individual lives and society as a whole. In this course, students will get a basic introduction to the building blocks and components of artificial intelligence, learning about concepts like algorithms, machine learning, and neural networks. Students will also explore how Al is already being used and evaluate problem areas of Al, such as bias. The course also contains a balanced look at Al's impact on existing jobs, as well as its potential to create new and exciting career fields in the future. Students will leave the course with a solid understanding of what AI is, how it works, areas of caution, and what they can do with the technology.

Intro to Business

This course introduces students to the basic business concepts that will help them understand how a business survives in today's economy and the role that consumers play in the same economy. Students will learn how to balance a checkbook, save for the future, and use credit wisely. Students will also learn how to create a resume and how to participate in a job interview.

Intro to Java Programming

Java is one of the most widely used computer languages in the world. This course will teach students Java by having them complete multiple projects, both in the console and user interface, including Mad Libs, player vs computer games, Battleship, Tic-Tac-Toe, picture shuffler and many more. This is course is meant to give students lots of experience in Java by creating multiple stand-alone programs. This course assumes no coding experience with Java programming and includes self-graded quizzes and tests.

Intro to Nursing A&B

This two-semester course introduces students to the field of nursing. In the first semester 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 B, 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.

JavaScript

In this course, students will learn how to start programming with JavaScript. Students will learn the basics of JavaScript including testing, functions, objects, arrays, loops, conditional code, operators, and syntax basics. Students will learn timing, animations, and how to debug. The class will conclude with a robust project that incorporates everything they learned in the semester. Students should have a working knowledge of HTML and CSS prior to taking this course.

JavaScript Game Design

JavaScript is one of the best languages to learn. It makes the browser come alive. Accelerate Education offers a JavaScript Game Design online course for grades 6-12. This course will teach students JavaScript through coding multiple computer games including, pong, fish, a platformer, and tower defense. They then will code or customize their own game. Students will be writing all the code themselves from going through the individual lessons and watching the video reviews. They will learn about variables, functions, listening events, loops, arrays and objects. This course assumes no coding experience and includes self-graded quizzes and tests. Students will also upload their work at the conclusion of each project while creating an online portfolio.

JavaScript Tower Defense

JavaScript is one of the best languages to learn. It makes the browser come alive. This course will teach students JavaScript through a tower defense game. They then will code or customize their own game. In this course, there are ten modules teaching students JavaScript. This assumes basic coding knowledge as students follow the lessons to program a large tower defense game in JavaScript. The course concludes with the students coding their very own game using a template of an existing game.

Journalism

This course is designed to prepares students for the field of journalism and media. The work will equip students with the critical skills needed to succeed in high school media, college media, and beyond. Students will read a variety of journalistic material and do a great deal of news writing. Students will also look at journalism from legal, ethical, and historic vantage points. Students can expect to complete numerous writing

activities in a variety of styles including editorial, hard news, feature, review, and more. If students participate actively, they will gain tremendous skills that will serve them for the rest of their life. Individual and group project will also be a part of this class. This course is a project-based course and does not include traditional tests. Unit level understanding is assessed through unit projects.

LEED Green Associate

This course introduces students to the LEED process. LEED, or Leadership in Energy and Environmental Design, is the global standard for green building certification. Throughout the course, students will gain an understanding of the various components of green building. The theme of sustainability and sustainable construction is woven throughout each module, both in terms of physical environment and as it pertains to LEED certification. This course prepares students for the LEED Green Associate Certification Exam.

Media and Communication

From banner ads to billboards, newspaper articles, and Facebook feeds, people are constantly sharing ideas. This course looks at the many facets of mass media. Students will learn how the media shapes every aspect of our lives. Students examine the role of newspapers, books, magazines, radio, movies, television, and the growing influence of Facebook, YouTube, and Twitter.

Medicine

This course provides students with an introduction to healthcare, with emphasis on modern, clinical medicine. Students review basic human anatomy and physiology, then study major health concerns affecting people in the U.S. and the world. This comprehensive, six-unit course examines such topics as infectious diseases, cancer, traumatic injuries, and healthcare career opportunities.

Microsoft Excel

This course introduces students to Microsoft Excel. Knowledge of this fundamental spreadsheet software has proven to boost career and employment prospects. Excel skills can boost productivity as a student and are useful in daily life, such as managing personal finances. Through an engaging and scaffolded approach, students advance from absolute basics like formatting and navigation, to performing complex tasks like data manipulation, macros, and PivotTables. This course prepares students for the Microsoft Office Specialist Excel Certification.

Microsoft Outlook

This course introduces students to Microsoft Outlook. Students will gain insights into the features and capabilities of this essential email software. Students progress from fundamental processes, like adding an account, to more complex tasks such as customizing features to better accommodate specific needs. This course prepares students for the Microsoft Office Specialist Outlook Certification Exam.

Microsoft PowerPoint

This course introduces students to Microsoft PowerPoint.

Students will gain critical skills in this essential presentation software, which will benefit them in their education and professional futures. Students start by learning fundamentals like slide creation and navigation and progress to more complex tasks like 3DModels, animations, and transitions. This course prepares students for the Microsoft Office Specialist Power-Point Certification Exam.

Microsoft Word

This course introduces students to Microsoft Word. Students will gain insights into the features and capabilities of this essential software within personal, educational, and business settings. Students progress from absolute basics like navigation to performing complex tasks like graphic elements and collaboration. This course prepares students for the Microsoft Office Specialist Word Certification Exam.

Networking

The Networking course identifies the key principles of networking in today's connected world. From network fundamentals and componentry to automation and programming, students learn the details of network access, connectivity, and security essentials. Through engaging interactivities, simulations, and projects, students will explore these networking concepts to further their career potential in this field. This course also prepares students for the Cisco Certified Network Associate (CCNA) Exam.

Project Management

The Project Management course is intended to identify the key components of a career as a project manager. Students will review the basics in project management terminology, such as designating distinctions among projects, products, programs, and portfolios. They will delve into concepts like managing deliverables and creating engaging relationships with stakeholders. The primary components of project planning will be laid out and described in detail. Students will explore teams and organizational structures. They will discover project management tools and innovation being used in the industry. Overall, they will develop a greater understanding of the mechanisms that are in place to effectively carry out projects of any size through specific project management techniques.

Python Multiplayer Adventure

Python is a powerful language designed to do just about anything. This course allows students to learn Python by first completing a text-based console game and then turning it into a multiplayer adventure. Students will not only learn Python from going through the individual lessons and video reviews and also understand a client server relationship. They will get to code in their own python web server that allows connections through a browser. Students will gain experience using variables, classes, functions, lists, dictionaries, generators and proper Python formatting. This is a great course for anyone interested in preparing themselves for future coding classes. This course assumes no coding experience and includes self-graded guizzes and tests.

QuickBooks

In this course, students will explore how to start using Quick-

Books Online. Learning this widely used accounting software will allow users to contribute to a large company's accounting team or to use it independently as a small business owner. Students will learn how to complete administrative and accounting functions within QuickBooks. These include basics such as setting up lists, customers, and products to more complex tasks like managing journal entries and creating reports. Additionally, they will learn about the various services and products that can be added. As students learn about the accounting functions, they will discover how to record transactions, expenses, and receipts.

Robloxs Worlds Coding with LUA

In this course, there are 10 (ten) modules teaching students LUA using Roblox Studio. This course assumes no prior coding knowledge as students follow the lessons to program multiple interactions within their obstacle course. The course allows students to customize and expand on all lessons as they create their own obstacle course and add custom LUA scripts in each lesson.

Robotics: Applications and Careers

It seems like many elementary to high school robotics courses are focused on simply coding a Lego robot to move its mechanical arm up and down. This course, in contrast, teaches students what a robot is and how it relates to other key technologies, such as artificial intelligence and machine learning. Then, the course examines ten applications of robots and how they will change and impact various aspects of our lives and the economy. Will robots simply steal our jobs, or will they be a tool that will create new opportunities and even free humans to use our creativity and curiosity to their full potential? Students will grapple with this and many other questions as they explore this vital, future-focused subject.

Smart Cities: Technology and Applications

This course will provide students with an overview of smart cities. The course will begin by providing a foundational explanation of what constitutes a smart city and why they are beginning to pop up around the globe. With a firm understanding of what a smart city is, the majority of the course will focus on various aspects of them such as energy, transportation, data, infrastructure, mobility, and IOT devices. The course will conclude with an analysis of careers related to smart cities.

Social Media Business Marketing

Whether it's posting pictures, videos, or interacting in the metaverse, today's students who aspire to apply their social media skills to business marketing must be prepared. This course on social media business marketing provides them with the foundational knowledge of social media technology and marketing principles. The course begins with an introduction to social media platforms and then goes in depth into the marketing and advertising strategies used to support a company's social media strategy and campaigns. Through activities and projects, students will gain firsthand knowledge of this exciting field. This course also prepares students for the Social Media Strategist Certification.

Startups and Innovation

Students hear a lot of contradictory advice in life. On one hand, they may hear something like "Follow your dreams. Pursue your passion and the money will come!" On the other hand, they may hear something completely opposite, like "Most startups fail! It's much safer to get a safe, steady job." So which side is right? Given the massive changes to the economy and society, the skills of entrepreneurship are going to be critical in building a lasting career. The entrepreneurial mindset of searching for opportunities, creating value, and solving pain points will always be valuable. And this mindset applies not just to starting a business, but in any organization that someone is a part of: school, established companies, or non-profits. In this course, students will explore how to use this mindset to create the next world-class startup.

Teaching as a Profession

Teaching can be a highly rewarding profession. Throughout the course, students will explore career opportunities within the field of education. They will learn what it means to be a professional in the classroom, whether it be working alongside co-teachers or managing an inclusive and diverse group of students. Students will learn about the code of conduct expected of educational professionals. Students will explore the history and best practices in the teaching profession as well as professional development opportunities. They will discover what it means to emerge as leaders in the field.

Transportation Technologies

This course introduces students to the newest and most cutting-edge futuristic transportation technologies out there. Students gain familiarity with the history of transportation development and understand a framework with which to evaluate new transportation modes. Then the course dives into ten different technologies on the horizon. Students examine the technologies, the pros and cons of each mode, and explore potential career paths in these emerging fields.

Wearable Technology Innovations

From hearing aids to pedometers to smart watches, humans have made and worn devices to overcome physical deficiencies, count their steps, and communicate. With the continue miniaturization of chips and sensors, combined with increasing sophistication of artificial intelligence, wearable technology has proliferated into countless end-markets. This course will introduce students to wearable technologies and the components and software that make these technologies possible. The course will also evaluate several applications of wearable technologies in various industries. Finally, the course will examine and discuss the implications of wearable technology, including its pros and cons, and potential implications to our health, privacy, and society.







