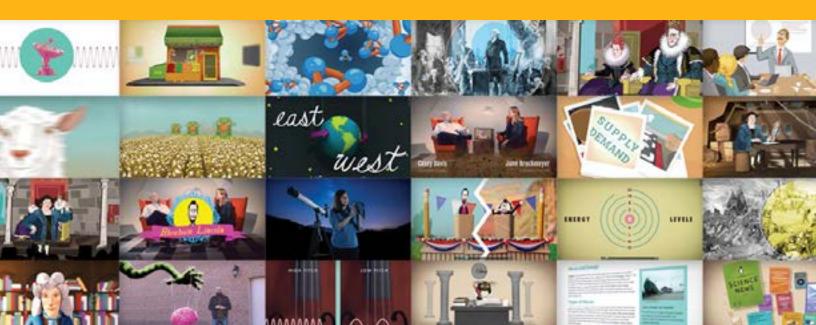
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### 2023-2024 9-12 COURSE CATALOG



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### **ENGLISH LANGUAGE ARTS**

#### ENGLISH LANGUAGE ARTS - GRADE 9

Grade: 9 Prerequisite(s): English 8 or equivalent <u>Course Intro Video</u> English Language Arts 9 (1 of 2) explores reading, writing, and analysis using both informational and literary texts, as well as comparison of texts in different mediums. Readings include The Princess and the Goblin by George MacDonald, and others to demonstrate understanding of textual evidence, themes, central ideas, inferences, word choice, figurative and connotative language; and grammar and usage. Writings include a personal narrative (memoir) and a literary analysis.

Grade: 9 Prerequisite(s): English 9 First Semester <u>Course Intro Video</u> English Language Arts 9 (2 of 2) explores reading, writing, and analysis using both informational and literary texts. Readings include Anthem by Ayn Rand and other texts of varying time periods to demonstrate concepts such as textual evidence, themes, central ideas, characters, inferences, rhetorical techniques, structure and style, and arguments and claims. Writing topics include grammar, usage, punctuation, spelling, style manuals, phrases, and clauses, culminating in an informational essay and an argument essay.

#### HONORS ENGLISH LANGUAGE ARTS - GRADE 9

Grade: 9 Prerequisite(s): English 8 or equivalent <u>Course Intro Video</u> English Language Arts 9 Honors (1 of 2) explores reading, writing, and analysis using both informational and literary texts, as well as comparison of texts in different mediums. Readings include The Princess and the Goblin by George MacDonald and others to demonstrate understanding of textual evidence, themes, central ideas, inferences, word choice, figurative and connotative language; and grammar and usage. Writings include a personal narrative (memoir) and a literary analysis.

Honors includes additional examples and practice for students.

Grade: 9

Prerequisite(s): English 9 Honors First Semester <u>Course Intro Video</u> English Language Arts 6 (2 of 2) explores literary texts from various genres, including novels, short stories, poems, and plays. Readings include The Wonderful Wizard of Oz by L. Frank Baum, excerpts from Little Women and The Adventures of Tom Sawyer, and poetry by Robert Louis Stevenson, Robert Frost, and Carl Sandburg as well multimedia readings of several videos of famous poems to demonstrate explicit and implicit information, theme, characters, plot, poetic techniques, and figurative language.

Honors includes additional examples and practice for students.

### ENGLISH LANGUAGE ARTS - GRADE 10

Grade: 10 Prerequisite(s): English 9 or equivalent <u>Course Intro Video</u> English Language Arts 10 (1 of 2) examines reading, writing, and analysis of informational texts, argument texts, and videos to demonstrate understanding of explicit and inferred meaning; textual evidence, central ideas, arguments and claims, organizational structures, figurative and rhetorical language; and the effect of word choice on tone. Skill building focuses on spelling, grammar, usage, punctuation, domain-specific vocabulary, context clues, and affixes. Writing topics include an informational essay and an argument essay.

Grade: 10 Prerequisite(s): English 10 first semester <u>Course Intro Video</u> English Language Arts 10 (2 of 2) explores reading, writing, and analysis of literary texts from around the world and across history. Readings include Antigone by Sophocles and others to demonstrate understanding of textual evidence, themes, inferences, characterization, figurative language, figures of speech, and literary devices; as well as building foundational knowledge of context clues, word nuances, affixes, phrases, clauses, and parallel construction. Writing topics include a literary analysis essay and a personal narrative essay.

### **HONORS ENGLISH LANGUAGE ARTS - GRADE 10**

Grade: 10 Prerequisite(s): English 9 honors or equivalent Course Intro Video Coming Soon! English Language Arts 10 Honors (1 of 2) investigates the writing and discourse processes while supplementing them with the reading and grammar strategies necessary to comprehend and compose nonfiction texts. Exploration of language skills in writing topics include researching, organizing, and developing descriptive, persuasive narrative, and expository compositions.

Honors includes additional examples and practice for students.

Grade: 10 Prerequisite(s): English 10 honors first semester <u>Course Intro Video</u> English Language Arts 10 Honors (2 of 2) explores literature from multiple eras and cultures. Readings include epic poetry, folktales, ancient verses, Greek tragedy such as Antigone by Sophocles, short stories, and excerpts from novels to examine language, ideas, characters, and literary elements. Exploration of evidence, context clues, symbolism, affixes, and denotative and connotative meanings are provided in short research and writing projects. Writing topics also include a character analysis and a personal narrative.

Honors includes additional examples and practice for students.



### ENGLISH LANGUAGE ARTS - GRADE 11

Grade: 11 Prerequisite(s): English 10 or equivalent <u>Course Intro Video</u> English Language Arts 11 (1 of 2) examines reading, writing, and analysis using both informational and argument texts. Readings include seminal US texts such as "What to the Slave Is the Fourth of July?" by Frederick Douglass, speeches, court documents, and scientific articles to explore textual evidence, central ideas, inferences, word choice, figurative language, spelling, hyphens, contested usage, figures of speech, and reference materials. Writing topics include a researched informational essay and a researched argument essay.

Grade: 11 Prerequisite(s): English 11 first semester <u>Course Intro Video</u> English Language Arts 11 (2 of 2) explores reading, writing, and analysis using both informational and literary texts. Readings include poetry and drama, such The Crucible by Arthur Miller to demonstrate literary elements of plot, setting, character, themes, and central ideas. Comparing works from different time periods, reviewing context and word nuances, and learning about punctuation, style manuals, phrases, clauses, and parallel structure to improve reading and writing skills. Writing topics include a fictional narrative and a literary analysis.

### HONORS ENGLISH LANGUAGE ARTS - GRADE 1

Grade: 11

Prerequisite(s): English 11 honors first semester Course Intro Video Coming Soon! English Language Arts 8 (1 of 2) explores analysis of literary and informational texts, including novels, short stories, myths, poems, magazine articles, and autobiographies. Readings include The Call of the Wild, short stories such as "The Lottery" and "The Tell-Tale Heart," and infographics and videos to demonstrate concepts such as explicit and implicit information, theme, central idea, figurative language, grammar, usage, and punctuation. Writings include the planning, creating, writing, revising, and editing of a fictional narrative.

Honors includes additional examples and practice for students.

Grade: 11 Prerequisite(s): English 11 honors first semester

Course Intro Video Coming Soon!

English Language Arts 11 Honors (2 of 2) explores American writers and the historical events that influenced their works. Reading selections include The Red Badge of Courage by Stephen Crane, works the following eras and influences: Transcendentalism, Romanticism, American Gothic, American Civil War, Regionalism, Realism, Naturalism, Imagist, Harlem Renaissance, and Modernism. The course emphasizes critical and analytical thinking as well as reading and writing skills.

Honors includes additional examples and practice for students.

### ENGLISH LANGUAGE ARTS - GRADE 12

Grade: 12 Prerequisite(s): English 11 or equivalent <u>Course Intro Video</u> English Language Arts 12 (1 of 2) explores analysis of informational and argument texts. Readings include seminal US texts such as the Declaration of Independence, presidential speeches, court documents, and articles related to innovative technology to demonstrate rhetoric, figurative language, theme, purpose, specialized vocabulary, text structure, word nuances, inferences, research, evidence, and reference sources. In addition, students learn about context clues, contested usage, and syntax errors. Writings include a researched informational essay and a researched argument essay.

Grade: 12 Prerequisite(s): English 12 first semester <u>Course Intro Video</u> English Language Arts 12 (2 of 2) analyzes narrative texts from British literature-from the

Middle Ages through modern times. Demonstrated skills include explicit and implicit meanings, figurative language, literary devices, central ideas, themes, and narrative and structural elements. Writings include a fictional narrative in the style of Gothic Romanticism and a literary analysis comparing and contrasting two British literature texts of different eras.

### HONORS ENGLISH LANGUAGE ARTS - GRADE 12

Grade: 12 Prerequisite(s): English 11 honors or equivalent Course Intro Video English Language Arts 12 Honors (1 of 2) explores rhetoric using informational texts, including seminal US documents that shaped legal and social policy to examine reasoning including the chain of legal reasoning.

Honors includes additional examples and practice for students.

Grade: 12 Prerequisite(s): English 12 honors first semester

Course Intro Video

English 12 Honors (2 of 2) synthesizes knowledge and uses critical thinking to analyze narrative texts from British literature across different eras — from the Middle Ages through modern times. Students read Frankenstein by Mary Shelley along with works by British writers such as Shakespeare and Tolkien. These reading selections demonstrate concepts such as narrative elements and structures, literary devices such as symbolism and sarcasm; and inference. Topics include: vocabulary, context clues, word choice, and affixes. In addition, students write a fictional narrative and a literary analysis.

Honors includes additional examples and practice for students.

### **AP® ENGLISH LANGUAGE & COMPOSITION - GRADE 9-12\***

Grade: 9-12 **Prerequisite(s):** English 9, English 10, English 11 Developed by a third party **Required Materials::** "Everything's an Argument, with Readings (8th Edition) ISBN: 9781319105181ISBN-13: 978-1-947172-13-5" This course helps students prepare to take the Advanced Placement Language and Composition Exam<sup>™</sup> 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.

\*This course requires additional software or materials to be purchased by the school.

Grade: 9-12 **Prerequisite(s):** English 9, English 10, English 11 Developed by a third party **Required Materials:** "Everything's an Argument, with Readings (8th Edition) ISBN: 9781319105181ISBN-13: 978-1-947172-13-5" 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.

\*This course requires additional software or materials to be purchased by the school.

### AP® ENGLISH ERA RE & COMPOSITION - GRADE 9-12\*

### Grade: 9-12 Prerequisite(s):

English 9, English 10, English 11 Developed by a third party **Required Materials:** Perrine's Literature: Structure, Sound, and Sense 13th Edition, 2017 Greg Johnson, Thomas Arp ISBN-13: 978-1305971035 ISBN-10: 1305971035 Crime and Punishment by Fyodor Dostoevsky; Native Son by Richard Wright; The Color Purple by Alice Walker; One Hundred ears of Solitude by Gabriel Garcia Marquez; Orlando by Virginia Woolf" Both semesters of 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.

\*This course requires additional software or materials to be purchased by the school.

Prerequisite(s): English 9, English 10, English 11 Developed by a third party Required Materials: Princeton Review AP English Literature & Composition Prep, 2022 ISBN-10: 0525570632 ISBN-13: 978-0525570639"

Grade: 9-12

Both semesters of 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.

\*This course requires additional software or materials to be purchased by the school.

#### **PRE-ALGEBRA - GRADE 6-9**

Grade: 6-9 Prerequisite(s): None Course Intro Video Pre-Algebra is a one-semester math course to build algebraic foundation to prepare students for Algebra I. Topics include: reviewing integers and rational numbers, properties of numbers and working with exponents and roots, mastering the order of operations, variables, how to simplify expressions and solve multi-step equations, lines and linear equations, ordered pairs, the coordinate plane, and graphs.

#### ALGEBRA 1 - GRADE 9-12

Grade: 9-12 Prerequisite(s): Math 8 Course Intro Video Algebra 1 (1 of 2) explores the application of properties to simplify expressions with exponents and radicals; relationships between rational and irrational numbers; solving linear equations and inequalities; applying knowledge of linear equations and inequalities to solve and graph systems of linear equations and inequalities; applying operations on polynomials; factoring quadratic expressions; and solving quadratic equations using different methods.

Grade: 9-12 Prerequisite(s): Algebra 1 first semester Course Intro Video Algebra 1 (2 of 2) explores the analysis of different types of functions presented as equations, graphs, tables, and verbal descriptions; identifying key features applied to real-world problems; using key features to compare different types of functions; transformations of functions; statistics; interpreting and analyzing data sets; as well as causation and correlation.

#### HONORS ALGEBRA 1 - GRADE 9-12

Grade: 9-12 Prerequisite(s): Math 8 <u>Course Intro Video</u> Algebra 1 Honors (1 of 2) explores algebraic problems and applies the knowledge to real-life situations. Topics include: linear inequalities; forms of linear equations; relating linear equations and functions; solving systems of equations and systems of inequalities; interpreting solutions mathematically and contextually; statistics; measures of central tendency; relative frequencies; and scatter plots.

Grade: 9-12 Prerequisite(s): Algebra 1 honors first semester <u>Course Intro Video</u> Algebra 1 Honors (2 of 2) explores functions by exploring new families of functions, the effect of different transformations, and key features of graphs and how they compare functions represented in different ways. Additional topics include: polynomials on quadratics, quadratic equations and their graphs, various methods of factoring and solving quadratic equations, exponential growth and decay, and how linear, quadratic, and exponential functions compare to one another.

#### **GEOMETRY - GRADE 9-12**

Grade: 9-12 Prerequisite(s): Algebra 1 Course Intro Video Geometry (1 of 2) explores writing formal proofs and constructing geometric figures. Topics include: transformations to explain the concepts of congruent and similar figures, with a focus on the properties of congruent and similar triangles. Properties are proved with postulates, theorems, and formal proofs, as well as trigonometric ratios and their applications to real-world situations.

Grade: 9-12 Prerequisite(s): Geometry 1 first semester

Course Intro Video

Geometry (2 of 2) explores writing formal proofs and constructing geometric figures. Topics include: slopes, midpoints, distance formula with a focus on their applications in coordinate proofs, theorems about circles and concepts related to circles; and two- and three-dimensional figures and probability.

### **HONORS GEOMETRY - GRADE 9-12**

Grade: 9-12 Prerequisite(s): Algebra 1 honors first semester Course Intro Video Geometry Honors (1 of 2) examines congruence, proofs, and constructions to prove statements about lines, angles, triangles, and quadrilaterals; applies the knowledge of transformations to learn a formal definition for similarity to write proofs, introduces trigonometry through its connection to the concept of similarity, deriving and using formulas for the areas and volumes of two-and three-dimensional figures; and they investigate cross sections and solids of revolutions.

Grade: 9-12 Prerequisite(s): Geometry 1 honors first semester <u>Course Intro Video</u> Geometry Honors (2 of 2) explores the Pythagorean theorem, distance formula, midpoint formula, and slope formula to solve geometric problems and develop coordinate proofs. Topics include: understand and apply theorems about circles to find arc lengths and areas of sectors of circles; apply the distance formula to write equations of circles in the coordinate system; and understand the concepts of permutations and combinations to explore the concept of probability.



#### ALGEBRA 2 - GRADE 9-12

Grade: 9-12 Prerequisite(s): Algebra 1 & Geometry <u>Course Intro Video</u> Algebra 2 (1 of 2) explores solving quadratic equations with complex solutions and performs operations on polynomials; uses polynomial identities to solve problems; analyzes polynomial functions using different representations; solves polynomial equations graphically; works with rational functions; and performing arithmetic operations on rational functions to graph them.

Grade: 9-12 Prerequisite(s): Algebra 2 first semester

Course Intro Video

Algebra 2 (2 of 2) explores radical equations, rewriting expressions involving radicals, and graphing and solve radical equations. Concepts of trigonometry include ratios and using the unit circle to understand them, graphing sine, cosine, and tangent functions; and explores key features to prove and apply trigonometric identities.

#### **HONORS ALGEBRA - GRADE 9-12**

Grade: 9-12 Prerequisite(s): Algebra 1honors & Geometry honors

Course Intro Video

Grade: 9-12 Prerequisite(s): Algebra 2 first semester <u>Course Intro Video</u> Algebra 2 Honors (1 of 2) explores polynomial, rational, radical, and trigonometric functions, solving equations, including quadratic equations over the complex numbers, as well as rational and radical equations.

Algebra 2 Honors (2 of 2) explores modeling real-life situations with equations and inequalities, solving exponential equations with logarithms, synthesizing and generalizing a variety of functions families; how to make probability decisions, and how to use statistics and sampling processes to understand data sets and answer questions about samples and populations.

### **EXTENDED ALGEBRA 2 - GRADE 9-12**

Grade: 9-12 Prerequisite(s): Algebra 1 & Geometry <u>Course Intro Video</u> Extended Algebra 2 (1 of 4) explores solving quadratic equations with complex solutions and performing operations on polynomials, using polynomial identities to solve problems, analyzing polynomial functions using different representations, solving polynomial equations graphically, working with rational functions, and performing arithmetic operations on rational functions to graph them.

Grade: 9-12 Prerequisite(s): Extended Algebra 2 first semester <u>Course Intro Video</u>

Grade: 9-12 Prerequisite(s): Extended Algebra 2 second semester Course Intro Video

Grade: 9-12 Prerequisite(s): Extended Algebra 2 third semester <u>Course Intro Video</u> Extended Algebra 2 (2 of 4) explores radical equations, rewriting expressions involving radicals, and graphing and solving radical equations. Concepts of trigonometry include ratios and using the unit circle to understand them, graphing sine, cosine; tangent functions, and exploring their key features to prove and apply trigonometric identities.

Extended Algebra 2 (3 of 4) explores modeling real-life situations with equations and inequalities, solving exponential equations with logarithms, and synthesizing and generalizing a variety of function families.

Extended Algebra 2 (4 of 4) explores how to make probability decisions, as well as how to use basic statistics and sampling processes to understand data sets and answer questions about samples and populations.

### **PRE-CALCULUS - GRADE 9-12**

Grade: 9-12 Prerequisite(s): None Developed by a third party In Pre-Calculus (Part A), 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.

Grade: 9-12 Prerequisite(s): None Developed by a third party Pre-Calculus (Part 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.

#### **FINANCIAL MATHEMATICS - GRADE 9-12**

Grade: 9-12 Prerequisite(s): Algebra 1

Course Intro Video

Financial Mathematics (1 of 1) investigates how to solve real-life problems, analyze current financial issues of taxes, loans, car leases, mortgages, and insurance. Mathematical processes are used to study patterns and analyze data, algebraic formulas, graphs, and amortization modeling.

### **APPLIED MATHEMATICS - GRADE 9-12**

Grade: 9-12 Prerequisite(s): Algebra 1

Course Intro Video

Applied Mathematics (1 of 1) examines how artists, video game developers, and musicians apply mathematical concepts to create; and how biologists use mathematics to measure the distances between cells and gain new insights about the body by applying concepts from geometry, functions, probability, and statistics.

### **CONSUMER MATH - GRADE 9-12**

Grade: 9-12 Prerequisite(s): None Developed by a third party Consumer Math (A) 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.

Grade: 9-12 Prerequisite(s): None Developed by a third party Consumer Math (B) 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.

### **COLLEGE MATHEMATICS PREPARATION - GRADE 11-12**

with a college.

Grade: 11-12 Prerequisite(s): Algebra 1, Algebra 2, Geometry

Course Intro Video

perimeter, area, surface area, and volume; converting units of measurement between different systems; and solving problems using exponential growth. \*This course may receive college credit through dual enrollment if the school has a partnership

College Math Preparation (1 of 2) explores mathematics in real-life situations, such as

investments and interest, calculating loans, and annuities. Topics include: comparing and contrasting solutions; interpreting results of calculations in context to a problem; calculating

Grade: 11-12 Prerequisite(s): College Mathematics Preparation First Semester

samples and populations. Topics include: distinguishing between sets, using Venn diagrams to solve applied problems, probability and permutations, statistics; and calculating and interpreting data.

College Math Preparation (2 of 2) explores how to make probability decisions, as well as how to

use basic statistics and sampling processes to understand data sets and answer questions about

<u>Course Intro Video</u>

\*This course may receive college credit through dual enrollment if the school has a partnership with a college.

### AP® CALCULUS - GRADE 11-12\*

Grade: 11-12 Prerequisite(s): Pre-Calculus A, Pre-Calculus B Developed by a third party **Required Materials:** Graphing Calculator Princeton Review AP Calculus AB Premium Prep, 2022 ISBN-10: 052557056X ISBN-13: 978-0525570561 AP Calculus (A) 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.

\*This course requires additional software or materials to be purchased by the school.

Grade: 11-12 **Prerequisite(s):** Pre-Calculus A, Pre-Calculus B Developed by a third party **Required Materials:** Graphing Calculator Princeton Review AP Calculus AB Premium Prep, 2022 ISBN-10: 052557056X ISBN-13: 978-0525570561 AP Calculus (B) 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.

\*This course requires additional software or materials to be purchased by the school.

### **AP® STATISTICS - GRADE 9-12\***

Grade: 9-12 Prerequisite(s): None Developed by a third party Required Materials: To complete hands-on projects, students will use a computer with one of the following operating systems: Windows 7, Windows 8, Windows 10;

Mac OS version 10.7 or higher

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.

\*This course requires additional software or materials to be purchased by the school.

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STRONG MIND

#### **PHYSICAL SCIENCE**

Grade: 9-12 Prerequisite(s): None Developed by a third party Physical Science (1 of 2) examines science as a whole and leads to how methods and tools provide scientists meaningful results. Topics include: chemistry to interpret chemical names; formulas, equations, and models to discover the types and properties of reactions and nuclear reactions and their uses; historical perspectives, and the social impacts.

Grade: 9-12 Prerequisite(s): Physical Science First Semester <u>Course Intro Video</u> Physical Science (2 of 2) explores physics, introduces topics in engineering, and the ways scientists think, communicate, and do their jobs. The topics of motion and force, including the motion of fluids and Newton's law, build a foundation to explore thermodynamics, energy, work, machines, waves, electricity, and magnetism.

### BIOLOGY

Grade: 9-12 Prerequisite(s): None Course Intro Video Biology (1 of 2) examines the basics of biochemistry and how it helps understand biological systems on Earth. Using logical thinking to identify relationships and draw conclusions, the course expands out from the building blocks of biochemistry to individual cells and cell membranes to understand cell division, reproduction, cell energy and metabolism, and photosynthesis.

Grade: 9-12 Prerequisite(s): Biology First Semester <u>Course Intro Video</u> Biology (2 of 2) examines the basics of genetics, natural selection, ecology, models of how matter and energy flow through ecosystems, and the technology to see the larger context and implications. Topics include the biological research topics of ethical guidelines in new biotechnology.

### **HONORS BIOLOGY**

Grade: 9-12 Prerequisite(s): None Course Intro Video Biology Honors (1 of 2) examines life at the cellular level by understanding how the scientific method is used by scientists to investigate questions and present their findings. Topics include chemical make up and size of cells, cell structure, the flow of energy, and how traits are inherited.

Grade: 9-12 Prerequisite(s): Biology Honors First Semester <u>Course Intro Video</u> Biology Honors (2 of 2) examines life on Earth from a big picture perspective by exploring the evolution of species and history of life on Earth. Topics include: living organisms from microorganisms to plants and animals, the human body systems, ecology, and how humans interact with the environment. Historical perspectives and societal impact of biology are included in each lesson.

### **CHEMISTRY**

Grade: 9-12 Prerequisite(s): None Course Intro Video

Grade: 9-12 Prerequisite(s): Chemistry First Semester Course Intro Video Chemistry (1 of 2) examines basic principles and properties of matter to see its everyday uses. Topics include: atomic models, and predicting chemical reactions to see how scientists can engineer them to solve problems.

Chemistry (2 of 2) culminates in the ability to evaluate the ethical and social implications of chemistry-related technologies. Topics include: matter, types of bonds and forces that hold atoms and molecules together, states of matter, phase changes, gas laws, solutions, thermodynamics and kinetics of chemical reactions, chemical equilibrium and electrochemistry, radiation, and the difference between nuclear fission and fusion.

#### **HONORS CHEMISTRY**

Grade: 9-12 Prerequisite(s): None Course Intro Video

Grade: 9-12 Prerequisite(s): Chemistry Honors First Semester <u>Course Intro Video</u> Chemistry Honors (1 of 2) examines basic principles and properties of matter to see its everyday uses. Topics include atomic models and predicting chemical reactions to see how scientists can engineer them to solve problems. The honors course offers additional examples and practice.

Chemistry Honors (2 of 2) culminates in the ability to evaluate the ethical and social implications of chemistry-related technologies. Topics include: matter, types of bonds and forces that hold atoms and molecules together, states of matter, phase changes, gas laws, solutions, thermodynamics and kinetics of chemical reactions, chemical equilibrium and electrochemistry, radiation, and the difference between nuclear fission and fusion. The honors course offers additional examples and practice.

### **PHYSICS**

Grade: 9-12 Prerequisite(s): None Developed by a third party Course Intro Video Coming Soon!

Grade: 9-12 Prerequisite(s): None Developed by a third party Course Intro Video Coming Soon! 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 mathematical 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 you know and can use trigonometry.

#### **ENVIRONMENTAL SCIENCE**

Grade: 9-12 Prerequisite(s): Chemistry Course Intro Video environment, including impacts of research on scientific thought and the environment by using scientific practices, evidence-based data and its display, as well as understanding how data informs societal decision making.

Environmental Science (1 of 2) examines the relationships between organisms and the

Grade: 9-12 Prerequisite(s): Chemistry, Environmental Science First Semester

Course Intro Video

Grade: 9-12

#### EARTH SCIENCE

Prerequisite(s): None Developed by a third party Course Intro Video Coming Soon!

> Grade: 9-12 Prerequisite(s): None

Developed by a third party Course Intro Video Coming Soon! Environmental Science (2 of 2) examines the relationship between humans and the environment including the past, present and future impacts of resource utilization, identifies pollution of the air, soil and water and its sources; and discusses regulations and actions that can and have been taken to mitigate harm to the Earth.

The first three modules of Semester 1 cover Scientific Inquiry, the Structure and Composition of the Universe, and the Features of the Solar System. Students learn the importance of scientific inquiry and how to communicate the results of scientific investigations. They then have material on the formation of the universe, including the Big Bang Theory, the motions of celestial objects, and stellar evolution. The third module covers material related to the Solar System, including features of the Sun and the planets and the movements of Earth. The second three modules of Semester 1 cover Weather, Climate, and Earth's Water Cycle. Students first learn in Module 4 about the atmosphere and clouds, as well as the factors that influence local and global climate. In Module 5 they continue by learning about weather and air masses, meteorology and storms. Module 6 then discusses the water cycle, including groundwater and ocean features, as well as water scarcity and pollution.

The first three modules of Semester 2 cover the physical structure of the Earth and Earth's tectonic system, including the rock cycle, tectonic activity, and mountain building. It then covers weathering and erosion and soil formation. The next material in the course then addresses the concept of systems; it addresses the Earth as a system, feedback in systems, and Earth's major nutrient cycles. The second three modules of Semester 2 cover geologic history, including the evolution of Earth's atmosphere, the geologic time scale, and the fossil record. It then goes over natural resources and the effects of human population on natural resources. The course wraps up with a discussion of human society and its interconnectedness with the Earth's environment, how science and technology work together, and the technological design process in earth science Applications.

#### **MARINE SCIENCE**

Grade: 9-12 Prerequisite(s): None Developed by a third party 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.

### **AP® BIOLOGY**

Grade: 9-12 Prerequisite(s): None

Developed by a third party

#### **Required Materials:**

Campbell Biology, 11th edition Lisa A. Urry, Michael L. Cain, Steven A. Wasserman, Peter V Minorsky, Jane B. Reece ISBN-13: 978-0134446417 Princeton Review AP Biology Premium Prep, ISBN-10: 0525570543, ISBN-13: 978-0525570547, AP Biology Lab Kit

Grade: 9-12 Prerequisite(s): None Developed by a third party **Required Materials:** Campbell Biology, 11th edition Lisa A. Urry, Michael L. Cain, Steven A. Wasserman, Peter V Minorsky, Jane B. Reece ISBN-13: 978-0134446417 Princeton Review AP Biology Premium Prep, ISBN-10: 0525570543 ISBN-13: 978-0525570547 AP Biology Lab Kit This course is taught at the college level and designed to prepare students to take the Advanced Placement Examination and 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 Biology Course Description. These include biochemistry, cell structure and function, cell energetics, cellular reproduction and communication, heredity, molecular genetics, evolution, ecology, diversity of organisms, structure and function of plants and animals; and comparative anatomy.

This course is taught at the college level and designed to prepare students to take the Advanced Placement Examination and 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 Biology Course Description. These include biochemistry, cell structure and function, cell energetics, cellular reproduction and communication, heredity, molecular genetics, evolution, ecology, diversity of organisms, structure and function of plants and animals; and comparative anatomy.



### **WORLD GEOGRAPHY - GRADE 9-12**

Grade: 9-12 Prerequisite(s): None Course Intro Video World Geography (1 of 2) explores the five themes of geography, analyzes the earth's processes, and how the processes impact both physical and human geography. Both physical and political maps are studied to examine trends and impacts with a focus on the Americas, Central Asia, and Europe.

Grade: 9-12 Prerequisite(s): World Geography First Semester

<u>Course Intro Video</u>

World Geography (2 of 2) continues the exploration of the five themes of geography with a focus on the Middle East, Africa, and Asia. Cultural beliefs and social and political systems are examined within the context of countries, regions, and global interactions.

#### **WORLD HISTORY - GRADE 9-12**

Grade: 9-12 Prerequisite(s): None Course Intro Video

Grade: 9-12 Prerequisite(s): World History First Semester <u>Course Intro Video</u> World History (1 of 2) explores key events and historical developments from hunter-gatherer societies to the Industrial Revolution. Beginning with the analysis of prehistoric people from the Paleolithic era to the Agricultural Revolution, the course follows the rise and fall of early empires including the Roman Empire. Topics include: The Crusades, feudalism, the plague, Asian empires and trade routes, effects of the Renaissance and Protestant Reformation, and important revolutions that shaped history.

World History (2 of 2) traces the developments of the last 250 years by examining the origins of modern Western imperialism and analyzing the cultural, economic, and political impacts on Africa and Asia. Topics include: the influence of the Industrial Revolution; the impact of imperialism and nationalism on World War I; how the Treaty of Versailles contributed to the rise of fascism in Europe and the start of World War II; 20th-century warfare; the Armenian Genocide; and the Holocaust.

### **HONORS WORLD HISTORY - GRADE 9-12**

Grade: 9-12 Prerequisite(s): None Course Intro Video World History Honors (1 of 2) explores the key events and global historical developments from hunter-gatherer societies to the Industrial Revolution. From the Paleolithic era and the Agricultural Revolution, students follow the rise and fall of early empires including Rome and Asian empires. Topics include: exploration of the impact of the Renaissance, Protestant Reformation, Age of Exploration and the American colonies; and analysis of important revolutions in history including the Scientific, American, and Industrial.

Honors includes additional examples and practice for students.

Grade: 9-12 Prerequisite(s): World History Honors First Semester <u>Course Intro Video</u> World History Honors (2 of 2) examines revolutions in the world and the establishment of European colonies around the globe by tracing the effects of imperialism and nationalism, eventually resulting World War I and II and the Cold War. Topics include: analyzing modern-day issues including social media, globalization, and technological advances and threats associated with them.

Honors includes additional examples and practice for students.

### **US HISTORY - GRADE 9-12**

Grade: 9-12 Prerequisite(s): None Course Intro Video US History (1 of 2) explores European exploration and the impact Europeans had on the lives of those native to North America. Topics include: the development of the English colonies in North America; causes and effects of the American Revolution; the ratification of the Constitution; causes of the War of 1812; analysis of sectionalism as a common thread; westward expansion; Civil War and Reconstruction; Indian Wars; immigration; and the Second Industrial Revolution.

Grade: 9-12 Prerequisite(s): US History First Semester Course Intro Video US History (2 of 2) traces pivotal events in American history and presidential administrations as the 21st century dawned. Topics include: The Gilded Age, Progressive Era, World War I, the Roaring Twenties, Great Depression, New Deal, World War II, the Cold War, and proxy conflicts like the Vietnam War and Korean War; technology innovations, global communications, and the rise of terrorism.

### **HONORS US HISTORY - GRADE 9-12**

Grade: 9-12 Prerequisite(s): None Course Intro Video US History Honors (1 of 2) explores European exploration and the impact Europeans had on the lives of those native to North America. Topics include: the development of the English colonies in North America; causes and effects of the American Revolution; the ratification of the Constitution; causes of the War of 1812; analysis of sectionalism as a common thread; westward expansion; Civil War and Reconstruction; Indian Wars; immigration; and the Second Industrial Revolution.

Honors includes additional examples and practice for students.

Grade: 9-12 Prerequisite(s): US History Honors First Semester <u>Course Intro Video</u> US History Honors (2 of 2) traces pivotal events in American history and presidential administrations as the 21st century dawned. Topics include: The Gilded Age, Progressive Era, World War I, the Roaring Twenties, Great Depression, New Deal, World War II, the Cold War, and proxy conflicts like the Vietnam War and Korean War; technology innovations, global communications, and the rise of terrorism. Honors includes additional examples and practice for students.

Honors includes additional examples and practice for students.

#### **US GOVERNMENT - GRADE 9-12**

Grade: 9-12 Prerequisite(s): None <u>Course Intro Video</u> US Government (1 of 1) examines the history and philosophy of the United States government and the guiding principles of democracy. Topics include: analysis of the United States Constitution; functions and duties of the three branches of government; the role of the Supreme Court; civic engagement in political process; the rights and responsibilities of citizens; government systems of the world; political parties; interest groups; and the media in shaping the government.

#### **HONORS US GOVERNMENT - GRADE 9-12**

Grade: 9-12 Prerequisite(s): None Course Intro Video US Government Honors examines early political ideas that led to the development of the United States government, the various smaller governments operating within the United States, and provides insights of local, state, and national levels of government. By examining how the United States interacts with the world regarding trade, immigration, and global conflicts, students discover how civic engagement influences the government.

### **CIVICS: CITIZENSHIP - GRADE 9-12**

Grade: 9-12 Prerequisite(s): None Course Intro Video Civics: Citizenship prepares for the Naturalization Test designed by the United States federal government. The course is for high school students in order to fulfill the requirement for graduation.

#### **ECONOMICS - GRADE 9-12**

Grade: 9-12 Prerequisite(s): None <u>Course Intro Video</u> Economics (1 of 1) explores principles to make informed decisions about personal finance, develop a broader understanding of national and international economic decisions and policies. Topics include: why economics impacts history, distribution of wealth, and quality of life for all members of society.

#### **ETHNIC STUDIES - GRADE 9-12**

Grade: 9-12 Prerequisite(s): None Developed by a third party 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.

Grade: 9-12

#### **AP® GOVERNMENT AND POLITICS - GRADE 9-12\***

Prerequisite(s): None Developed by a third party **Required Materials:** American Democracy Now, Fifth Edition, AP Edition ISBN-13: 978-0076788279 ISBN-10: 007678827X Princeton Review AP U.S. Government & Politics Premium Prep, 2022 ISBN-10: 0525570764 ISBN-13: 978-0525570769"

Grade: 9-12 Prerequisite(s): None Developed by a third party Required Materials: American Democracy Now, Fifth Edition, AP Edition ISBN-13: 978-0076788279 ISBN-10: 007678827X Princeton Review AP U.S. Government & Politics Premium Prep, 2022 ISBN-10: 0525570764

ISBN-13: 978-0525570769"

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.

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### **CREDIT RECOVERY FOR ENGLISH 9**

Grade: 9 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for English 9 (1 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course explores reading, writing, and analysis using both informational and literary texts. Readings include Anthem by Ayn Rand and other texts of varying time periods to demonstrate concepts such as textual evidence, themes, central ideas, characters, inferences, rhetorical techniques, structure and style, and arguments and claims. Writing topics include grammar, usage, punctuation, spelling, style manuals, phrases, and clauses, culminating in an informational essay and an argument essay.

Grade: 9 Prerequisite(s): None

Course Intro Video Coming Soon!

Credit Recovery for English 9 (2 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course explores reading, writing, and analysis using both informational and literary texts. Readings include Anthem by Ayn Rand and other texts of varying time periods to demonstrate concepts such as textual evidence, themes, central ideas, characters, inferences, rhetorical techniques, structure and style, and arguments and claims. Writing topics include grammar, usage, punctuation, spelling, style manuals, phrases, and clauses, culminating in an informational essay and an argument essay.

#### **CREDIT RECOVERY FOR ENGLISH 10**

Grade: 10 Prerequisite(s): None Course Intro Video Coming Soon!

Grade: 10 Prerequisite(s): None Course Intro Video Coming Soon! clues, and affixes. Writing topics include an informational essay and an argument essay. Credit Recovery for English 10 (2 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course explores reading, writing, and analysis of literary texts from around the world and across history. Readings include Antigone by Sophocles and others to demonstrate understanding of textual evidence, themes, inferences, characterization, figurative language, figures of speech, and literary devices; as well as building

foundational knowledge of context clues, word nuances, affixes, phrases, clauses, and parallel construction. Writing topics include a literary analysis essay and a personal narrative essay.

Credit Recovery for English 10 (1 of 2) is designed to help students catch up on learning

and earn missing credits needed for graduation. This course examines reading, writing, and analysis of informational texts; argument texts, videos to demonstrate understanding of explicit

and inferred meaning, textual evidence, central ideas, arguments, and claims; organizational

building focuses on spelling, grammar, usage, punctuation, domain-specific vocabulary, context

structures, figurative and rhetorical language; and the effect of word choice on tone. Skill-

### **CREDIT RECOVERY ENGLISH 11**

Grade: 11 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for English 11 (1 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course examines reading, writing, and analysis using both informational and argument texts. Readings include seminal US texts such as "What to the Slave Is the Fourth of July?" by Frederick Douglass, speeches, court documents, and scientific articles to explore textual evidence, central ideas, inferences, word choice, figurative language, spelling, hyphens, contested usage, figures of speech, and reference materials. Writing topics include a researched informational essay and a researched argument essay.

Grade: 11 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for English 11 (2 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course explores reading, writing, and analysis using both informational and literary texts. Readings include poetry and drama, such The Crucible by Arthur Miller, to demonstrate literary elements of plot, setting, character, themes, and central ideas. Comparing works from different time periods, reviewing context and word nuances; and learning about punctuation, style manuals, phrases, clauses, and parallel structure to improve reading and writing skills. Writing topics include a fictional narrative and a literary analysis.

### **CREDIT RECOVERY FOR ENGLISH 12**

Grade: 12 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for English 12 (1 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course explores analysis of informational and argument texts. Readings include seminal US texts such as the Declaration of Independence, presidential speeches, court documents, and articles related to innovative technology to demonstrate rhetoric, figurative language, theme, purpose, specialized vocabulary, text structure, word nuances, inferences, research, evidence, and reference sources. In addition, students learn about context clues, contested usage, and syntax errors. Writings include a researched informational essay and a researched argument essay.

Grade: 12 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for English 12 (2 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course analyzes narrative texts from British literature — from the Middle Ages through modern times. Demonstrated skills include explicit and implicit meanings, figurative language, literary devices, central ideas, themes, and narrative and structural elements. Writings include a fictional narrative in the style of Gothic Romanticism and a literary analysis comparing and contrasting two British literature texts of different eras.



### **CREDIT RECOVERY FOR ALGEBRA 1**

Grade: 9-12 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for Algebra 1 (1 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course explores solving quadratic equations with complex solutions and performing operations on polynomials; uses polynomial identities to solve problems; analyzes polynomial functions using different representations; solves polynomial equations graphically; and works with rational functions and performing arithmetic operations on rational functions to graph them.

Grade: 9-12 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for Algebra 1 (2 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course explores the analysis of different types of functions presented as equations, graphs, tables, and verbal descriptions; identifying key features applied to real-world problems; using key features to compare different types of functions; transformations of functions; statistics; interpreting and analyzing data sets; as well as causation and correlation.

#### **CREDIT RECOVERY FOR GEOMETRY**

Grade: 9-12 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for Geometry (1 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course explores solving quadratic equations with complex solutions and performing operations on polynomials; uses polynomial identities to solve problems; analyzes polynomial functions using different representations; solves polynomial equations graphically; and works with rational functions and performing arithmetic operations on rational functions to graph them.

Grade: 9-12 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for Geometry (2 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course explores writing formal proofs and constructing geometric figures. Topics include: slopes, midpoints, distance formula with a focus on their applications in coordinate proofs, theorems about circles as well as concepts related to circles; and two-and three-dimensional figures and probability.

### **CREDIT RECOVERY FOR ALGEBRA 2**

Grade: 9-12 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for Algebra 2 (1 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course explores solving quadratic equations with complex solutions and performs operations on polynomials; uses polynomial identities to solve problems; analyzes polynomial functions using different representations; solves polynomial equations graphically; and works with rational functions and performing arithmetic operations on rational functions to graph them.

Grade: 9-12 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for Algebra 2 (2 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course explores radical equations, rewriting expressions involving radicals, and graphing and solve radical equations. Concepts of trigonometry include ratios and using the unit circle to understand them, graphing sine, cosine, and tangent functions; and explores key features to prove and apply trigonometric identities.

### **CREDIT RECOVERY FOR PHYSICAL SCIENCE**

Grade: 9-12 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for Physical Science (1 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course examines science as a whole and leads to how methods and tools provide scientists meaningful results. Topics include: chemistry to interpret chemical names; formulas, equations, and models to discover the types and properties of reactions and nuclear reactions and their uses; historical perspectives, and the social impacts.

Grade: 9-12 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for Physical Science (2 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course explores physics, introduces topics in engineering, and the ways scientists think, communicate, and do their jobs. The topics of motion and force, including the motion of fluids and Newton's law, build a foundation to explore thermodynamics, energy, work, machines, waves, electricity, and magnetism.

### **CREDIT RECOVERY FOR BIOLOGY**

Grade: 9-12 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for Biology (1 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course examines the basics of biochemistry and how it helps understand biological systems on Earth. Using logical thinking to identify relationships and draw conclusions, the course expands out from the building blocks of biochemistry to individual cells and cell membranes to understand cell division, reproduction, cell energy and metabolism, and photosynthesis.

Grade: 9-12 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for Biology (2 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course examines the basics of genetics, natural selection, ecology, models how matter and energy flow through ecosystems; and the technology to see the larger context and implications. Topics include: biological research topics of ethical guidelines in new biotechnology.

#### **CREDIT RECOVERY FOR CHEMISTRY**

Grade: 9-12 Prerequisite(s): None Course Intro Video Coming Soon!

Grade: 9-12 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for Chemistry (1 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course examines basic principles and properties of matter to see its everyday uses. Topics include: atomic models, predicting chemical reactions to see how scientists can engineer them to solve problems.

Credit Recovery for Chemistry (2 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course culminates in the ability to evaluate the ethical and social implications of chemistry-related technologies. Topics include: matter, types of bonds and forces that hold atoms and molecules together, states of matter, phase changes, gas laws, solutions, thermodynamics and kinetics of chemical reactions; chemical equilibrium and electrochemistry; and radiation and the difference between nuclear fission and fusion.

### **CREDIT RECOVERY FOR US HISTORY**

Grade: 9-12 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for US History (1 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course explores European exploration and the impact Europeans had on the lives of those native to North America. Topics include: the development of the English colonies in North America; causes and effects of the American Revolution; the ratification of the Constitution; causes of the War of 1812; analysis of sectionalism as a common thread; westward expansion; Civil War and Reconstruction; Indian Wars; immigration; and the Second Industrial Revolution.

Grade: 9-12 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for US History (2 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course traces pivotal events in American history and presidential administrations as the 21st century dawns. Topic include: The Gilded Age, Progressive Era, World War I, the Roaring Twenties, Great Depression, New Deal, World War II, the Cold War, and proxy conflicts like the Vietnam War and Korean War, technology innovations, global communications, and the rise of terrorism.

#### **CREDIT RECOVERY FOR WORLD HISTORY**

Grade: 9-12 Prerequisite(s): None Course Intro Video Coming Soon!

Grade: 9-12 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for World History (1 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course explores key events and historical developments from hunter-gatherer societies to the Industrial Revolution. Beginning with the analysis of prehistoric people from the Paleolithic era to the Agricultural Revolution, the course follows the rise and fall of early empires including the Roman Empire. Topics include: The Crusades, feudalism, the plague, Asian empires and trade routes, effects of the Renaissance and Protestant Reformation, and important revolutions that shaped history.

Credit Recovery for World History (2 of 2) is designed to help students catch up on learning and earn missing credits needed for graduation. This course traces the developments of the last 250 years by examining the origins of modern Western imperialism and analyzing the cultural, economic, and political impacts on Africa and Asia. Topics include: the influence of the Industrial Revolution, the impact of imperialism and nationalism on World War I, how the Treaty of Versailles contributed to the rise of fascism in Europe and the start of World War II, 20thcentury warfare, the Armenian Genocide, and the Holocaust.



### **CREDIT RECOVERY FOR US GOVERNMENT**

Grade: 9-12 Prerequisite(s): None Course Intro Video Coming Soon! Credit Recovery for US Government (1 of 1) is designed to help students catch up on learning and earn missing credits needed for graduation. This course examines the history and philosophy of the United States government and the guiding principles of democracy. Topics include: analysis of the United States Constitution; functions and duties of the three branches of government; the role of the Supreme Court; civic engagement in political process; the rights and responsibilities of citizens; government systems of the world; political parties; interest groups; and the media in shaping the government.

### **CREDIT RECOVERY FOR ECONOMICS**

Grade: 9-12 Prerequisite(s): None rse Intro Video Coming Soon! Credit Recovery for Economics (1 of 1) is designed to help students catch up on learning and earn missing credits needed for graduation. This course explores principles to make informed decisions about personal finance, develop a broader understanding of national and international economic decisions and policies. Topics include: why economics impacts history, distribution of wealth, and quality of life for all members of society.

#### AMERICAN SIGN LANGUAGE I

Grade: 9-12 Prerequisite(s): None Course Intro Video American Sign Language I (1 of 2) provides an introduction to American Sign Language (ASL). The course provides guidance in how to communicate with ASL across a variety of basic subjects, including greetings and introductions, information sharing, personal characteristics, family, travelling, and living spaces. The course also explores details about Deaf culture, the history of ASL, and the general rules and concepts needed for communicating effectively through sign language, including fingerspelling and signing parameters.

Grade: 9-12 Prerequisite(s): ASL I first semester Course Intro Video American Sign Language I (2 of 2) continues to explore introductory concepts in American Sign Language (ASL). The course builds on the first half to guide students in how to communicate on a variety of basic subjects, including with food items, directions, store interactions, job roles, health topics, and plans built around schedules and times. The course also highlights more details about Deaf culture, the history of ASL, and the general rules and concepts needed for communicating effectively through sign language, including classifiers and specific grammar rules.

#### AMERICAN SIGN LANGUAGE II

Grade: 9-12 Prerequisite(s): ASL 1 Course Intro Video

Grade: 9-12 Prerequisite(s): ASL II first semester Course Intro Video American Sign Language II (1 of 2) explores intermediate concepts related to Deaf culture and American Sign Language (ASL). The course begins with a review of cultural facts and ASL rules and concepts from American Sign Language I. New topics that follow include major milestones and famous figures in Deaf cultural history, appropriate etiquette and behaviors in Deaf interactions, ASL literature and performances, and different language styles and skills among Deaf communities, among others. Projects throughout the course will assess knowledge of signing vocabulary and mastery of proper signing form.

American Sign Language II (2 of 2) explores intermediate concepts related to Deaf culture and American Sign Language (ASL). Topics include the ways to be considered a part of the Deaf community, history of minority subgroups within the community, accessibility options that help deaf people function effectively in everyday society, and common ASL signing approaches and techniques that deaf people are likely to practice. Vocabulary activities provide demonstrations of signs related to topics like money, leisure activities, and thoughts and opinions. Projects throughout the course asses signing vocabulary and mastery of proper signing form.

#### **SPANISH 1**

Grade: 9-12 Prerequisite(s): None Course Intro Video Spanish 1 (1 of 2) introduces the basics of the Spanish language by learning through reading, writing, listening, and speaking about personal interests and hobbies; asking for directions; and how to discuss activities with friends using vocabulary associated with restaurants, traveling, and vacations. The course also explores cultures of some Spanish-speaking countries, such as Mexico, Colombia, Argentina, Spain, and Peru.

Grade: 9-12 Prerequisite(s): Spanish 1 first semester Course Intro Video Spanish 1 (2 of 2) explores how to discuss school subjects, professions, and daily routines; as well as illness and injury; shopping; and money through reading, writing, listening, and speaking. The course also explores cultures of some Spanish-speaking countries, such as Venezuela, Chile, Ecuador, Guatemala, and Cuba.

#### **SPANISH 2**

Grade: 9-12 Prerequisite(s): Spanish 1 Course Intro Video Spanish 2 (1 of 2) builds reading, writing, listening, and speaking skills in order to discuss social relationships, climate, various animals, fables, holiday customs and traditions, and outdoor activities. The course also explores cultures of some Spanish-speaking countries, such as Paraguay, Puerto Rico, El Salvador, Costa Rica, and Bolivia. Topics include: history, products, traditions, practices, and perspectives of each of these countries.

Grade: 9-12 Prerequisite(s): Spanish 1, Spanish 2 first semester <u>Course Intro Video</u> Spanish 2 (2 of 2) continues to build reading, writing, listening, and speaking skills in order to discuss transportation, extracurricular interests, professions, cuisine, clothing, health, and technology. Topics include: present, past, future, and conditional tenses; present subjunctive mood; explores cultures of some Spanish-speaking countries, such as the Dominican Republic, Equatorial Guinea, Honduras, Uruguay, and Panama.

#### **SPANISH 3**

Grade: 9-12 Prerequisite(s): Spanish 1, Spanish 2 <u>Course Intro Video</u> Spanish 3 (1 of 2) builds reading and writing of informative, argumentative, and descriptive texts; listening and speaking skills using the indicative subjunctive and imperative moods. The course also explores significant historical events of some Spanish-speaking countries, as well as cultural products, practices, and philosophies.

Grade: 9-12 Prerequisite(s): Spanish 1, Spanish 2, Spanish 3 first semester

Course Intro Video

Spanish 3 (2 of 2) continues acquiring the Spanish language through reading poems and short stories by notable Spanish-language authors. The continuation of writing, listening, and speaking includes exploring behavioral norms in different Spanish-speaking cultures, in order to discuss these topics in the indicative and subjunctive moods in a variety of tenses.

#### **AP® SPANISH LANGUAGE\***

Grade: 9-12 Prerequisite(s): None Developed by a third party **Required Materials:** Abriendo paso: Temas y lecturas 2014 Realize, ISBN: 9780328954445 Abriendo paso: Gramatica 2014 Realize, ISBN: 9780328954346 Call Savvas Customer Service to Purchase these two eTextbooks at 800-848-9500. Press #5, then #3, then #3. Specify to agent that it is for an online private school. **Optional: Princeton Review AP Spanish** Language & Culture Prep, 2023 The AP Spanish Language and Culture course is an advanced language course in which students are directly prepared for the AP Spanish Language and Culture test. It uses as its foundation the three modes of communication: interpersonal, interpretive and presentational. The course is conducted almost exclusively in Spanish. The course is based on the six themes required by the College Board: (1) global challenges, (2) science and technology, (3) contemporary life, (4) personal and public identities, (5) families and communities, and (6) beauty and aesthetics. The course teaches language structures in context and focuses on the development of fluency to convey meaning. Students explore culture in both contemporary and historical contexts to develop an awareness and appreciation of cultural products, practices, and perspectives. Students should expect to listen to, read, and understand a wide-variety of authentic Spanishlanguage materials and sources, demonstrate proficiency in interpersonal, interpretive, and presentational communication using Spanish, gain knowledge and understanding of the cultures of Spanish speaking areas of the world, use Spanish to connect with other disciplines and expand knowledge in a wide-variety of contexts, develop insight into the nature of the Spanish language and its culture, and use Spanish to participate in communities at home and around the world. The AP Spanish Language and Culture course is a college level course. The intensity, quality, and amount of course material can be compared to that of a third-year college course.

\*This course requires additional software or materials to be purchased by the school.

#### **AP® SPANISH LANGUAGE\***

Grade: 9-12 Prerequisite(s): None Developed by a third party **Required Materials:** Abriendo paso: Temas y lecturas 2014 Realize, ISBN: 9780328954445 Abriendo paso: Gramatica 2014 Realize, ISBN: 9780328954346 Call Savvas Customer Service to Purchase these two eTextbooks at 800-848-9500. Press #5, then #3, then #3. Specify to agent that it is for an online private school. **Optional: Princeton Review AP Spanish** Language & Culture Prep, 2023

### FRENCH 1

Grade: 9-12 Prerequisite(s): None Developed by a third party Course Intro Video Coming Soon!

#### Grade: 9-12

Prerequisite(s): French 1 first semester Developed by a third party

Course Intro Video Coming Soon

The AP Spanish Language and Culture course is an advanced language course in which students are directly prepared for the AP Spanish Language and Culture test. It uses as its foundation the three modes of communication: interpersonal, interpretive, and presentational. The course is conducted almost exclusively in Spanish. The course is based on the six themes required by the College Board: (1) global challenges, (2) science and technology, (3) contemporary life, (4) personal and public identities, (5) families and communities, and (6) beauty and aesthetics. The course teaches language structures in context and focuses on the development of fluency to convey meaning. Students explore culture in both contemporary and historical contexts to develop an awareness and appreciation of cultural products, practices, and perspectives. Students should expect to listen to, read, and understand a wide-variety of authentic Spanishlanguage materials and sources, demonstrate proficiency in interpersonal, interpretive, and presentational communication using Spanish, gain knowledge and understanding of the cultures of Spanish speaking areas of the world, use Spanish to connect with other disciplines and expand knowledge in a wide-variety of contexts, develop insight into the nature of the Spanish language and its culture, and use Spanish to participate in communities at home and around the world. The AP Spanish Language and Culture course is a college level course. The intensity, quality, and amount of course material can be compared to that of a third-year college course.

\*This course requires additional software or materials to be purchased by the school.

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 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**

Grade: 9-12 Prerequisite(s): French 1 Developed by a third party

Course Intro Video Coming Soon!

Grade: 9-12 Prerequisite(s): French 2 first semester Developed by a third party

## **FRENCH 3**

Grade: 9-12 Prerequisite(s): French 1, French 2 Developed by a third party

Grade: 9-12 Prerequisite(s): French 3 first semester Developed by a third party Semester A focuses on the continuation and enhancement of language skills presented in Level 1. Vocabulary and grammar structures are revisited and expanded to provide students an opportunity to move towards an intermediate comprehension level. 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, reading of culturally-related articles of interest and responding to reading in the target language. The use of technology enhances and reinforces authentic language development and fosters cultural understandings through exposure to native speakers and their daily routines.

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, to the Olympics, to natural disasters, and to 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.

Students further deepen their understanding of French by focusing on the three modes of communication: interpretive, interpersonal, and presentational. Each unit consists of a variety of activities which teach the students how to understand more difficult written and spoken passages, to communicate with others through informal speaking and writing interactions, and to express their thoughts and opinions in more formal spoken and written contexts. Students should expect to be actively engaged in their own language learning, use correct vocabulary terms and phrases naturally, incorporate a wide range of grammar concepts consistently and correctly while speaking and writing, participate in conversations covering a wide range of topics and respond appropriately to conversational prompts, analyze and compare cultural practices, products, and perspectives of various French-speaking countries, read and analyze important pieces of Hispanic literature, and take frequent assessments where their language progression can be monitored. The course is conducted almost entirely in French. The course has been carefully aligned to national standards as set forth by ACTFL (the American Council on the Teaching of Foreign Languages).

Students further deepen their understanding of French by focusing on the three modes of communication: interpretive, interpresonal, and presentational. Each unit consists of a variety of activities which teach the students how to understand more difficult written and spoken passages, to communicate with others through informal speaking and writing interactions, and to express their thoughts and opinions in more formal spoken and written contexts. Students should expect to be actively engaged in their own language learning, use correct vocabulary terms and phrases naturally, incorporate a wide range of grammar concepts consistently and correctly while speaking and writing, participate in conversations covering a wide range of topics and respond appropriately to conversational prompts, analyze and compare cultural practices, products, and perspectives of various French-speaking countries, read and analyze important pieces of Hispanic literature, and take frequent assessments where their language progression can be monitored. The course is conducted almost entirely in French. The course has been carefully aligned to national standards as set forth by ACTFL (the American Council on the Teaching of Foreign Languages).

### **GERMAN 1**

Grade: 9-12 Prerequisite(s): None Developed by a third party

Course Intro Video Coming Soon!

This German 1A course is an introductory course teaching basic comprehension and communication in German. It coordinates the study of language with culture through the use of video, audio and mass media production. This course assumes prior or no knowledge of the German language. It introduces the fundamentals of conversational and grammatical patterns of the German language with presentations to present the material. Students who complete the course successfully will begin to develop a functional competency in the four primary language areas: speaking, reading, listening and writing, while establishing a solid grammatical base and exploration into German culture.

Grade: 9-12 Prerequisite(s): German 1 first semester Developed by a third party The second semester course will expand on the knowledge gained from German 1A and further develop their skills in pronunciation, grammar skills, grammar structures and vocabulary. Oral practice (via Voice Tools), homework assignments, games, songs, watching videos, quizzes, tests, projects and other activities such as writing wikis and journal entries, will be emphasized to accomplish this goal. The different cultures of the German-speaking world are emphasized through readings, videos and other activities. Taking the time to learn another language is a mind-expanding activity that can open up a world of opportunities and advantages.

### **GERMAN 2**

Grade: 9-12 Prerequisite(s): German 2 Developed by a third party In this course, students build on grammar and language skills that they acquired during their G1A and G1B courses. While reviewing basic grammar skills, (present and past tenses), students learn and study stem-changing verb conjugation and explore cultural themes regarding current events, famous German people, music and famous festivals.

#### Grade: 9-12

Prerequisite(s): German 2 first semester Developed by a third party 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, to going to the zoo and also to travel throughout the German-speaking world.

# GRADES 9-12 PHYSICAL EDUCATION / HEALTH

## **HEALTH 101**

Grade: 9-12 Prerequisite(s): None Course Intro Video Health 101 (1 of 1) explores how behavioral choices, such as nutrition and physical activity, affect health, then provides information to make healthy choices. Topics include: nutrition and physical activity; growth, development, and sexual health; safety and injury prevention; alcohol, tobacco, and other drugs; mental, emotional, and social health; and personal and community health.

### **PHYSICAL EDUCATION**

Grade: 9-12 Prerequisite(s): None Course Intro Video

Grade: 9-12

Physical Education (1 of 1) examines the importance of physical activity, personal fitness, and healthy eating habits. Topics include: useful techniques and different aspects of sport and recreation, a personal fitness evaluation, the design of a personal exercise plan and tracking of results.

Grade: 9-12 Prerequisite(s): None Course Intro Video Physical Education (1 of 1) explores key concepts that lead to improved fitness, wellness, and overall health. Topics include: description of the human body, including anatomy, physiology, and nutrition; practical applications, such as metabolism manipulation, correct exercise form, and effective programming for personal health goals.

## **FIRST AID**

Grade: 9-12 Prerequisite(s): None Developed by a third party 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.

## NUTRITION

Grade: 9-12 Prerequisite(s): None Developed by a third party 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.



# **ELECTIVES**

## ACCOUNTING

Grade: 9-12 Prerequisite(s): None Developed by a third party In this semester course, you will explore accounting, including investigating accounting careers. You 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. You 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.

## ANATOMY AND PHYSIOLOGY

Grade: 9-12 Prerequisite(s): None Developed by a third party

Anatomy and Physiology (2 of 2) 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.

## **AP® COMPUTER SCIENCE PRINCIPLES\***

Grade: 9-12 Prerequisite(s): Intro to Java Programming Developed by a third party **Required Materials:** Students will need a computer with one of the following operating systems: Windows 7, Windows 8, Windows 10 Mac OS version 10.7 or higher This course is for those who have completed the Intro to Java course or some Java course equivalent. It dives deeper into Java and prepares the student for the AP Computer Science exam. High School AP Computer Science requires the student to spend time learning terminology and completing practice exams and quizzes. Students will be studying Java through coding their own programs as well as reading assignments.

\*This course requires additional software or materials to be purchased by the school.

## **ART HISTORY: MODERN**

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Prerequisite(s): None Course Intro Video

Grade: 9-12

Art History: Modern (1 of 1) explores art of the late 1700s to modernity from Western movements in artworks and architecture to China, Japan, Africa, Oceania, Southeast Asia, India.

\*Given the subject matter, the course is extensively visual. Please also be aware that this course includes depictions of nudity, as many art movements celebrated the human form. Many important and influential works of art include nudity, and it would be nearly impossible to teach art history without including them.

### **ART HISTORY: ORIGINS**

Grade: 9-12 Prerequisite(s): None <u>Course Intro Video</u> I Art History: Origins (1 of 1) explores art of the prehistoric, ancient, medieval, Renaissance and Rococo periods to understand how to read and interpret art.

\*Given the subject matter, the course is extensively visual. Please also be aware that this course includes depictions of nudity, as many art movements celebrated the human form. Many important and influential works of art include nudity, and it would be nearly impossible to teach art history without including them.

## **BUSINESS LAW**

Grade: 9-12 Prerequisite(s): None Developed by a third party 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 to also understand your consumer rights. As they progress through the course, they will also gain an understanding from a business perspective what is 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 PLANNING**

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Grades: 9-12 Prerequisite(s): None Developed by a third party The 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.

## **CHARACTER EDUCATION**

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Grades: 9-12 Prerequisite(s): None **Course Intro Video** 

Character Education (1 of 1) explores values of truthfulness, trustworthiness, responsibility, diligence, and integrity. The course offers specific, real world situations to interpret and connect to these traits to provide safe and appropriate ways to respond in real time. Topics include: identifying bullying, how to develop a bullying-prevention mindset.

## **CHILD DEVELOPMENT**

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Grades: 9-12 Prerequisite(s): None Developed by a third party This course is designed to help prepare students for their responsibilities as parents and caregivers of children. Topics include prenatal care, growth and development through age six, teen pregnancy, maternal health, parenting skills, and child guidance.

### **CRIMINOLOGY & FORENSICS**

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Grades: 9-12 Prerequisite(s): None

None

Criminology and Forensics (1 of 1) is a beginner level course on the topics of crime and forensic procedures exploring topics on crime and criminology, witnesses and perpetrators, and the crime lab.

## **CRIMINOLOGY & JUSTICE**



Grades: 9-12 Prerequisite(s): Criminology and Justice (1 of 1) is a beginner-level course on criminal procedures that explores the criminal justice system, non-forensic evidence, and what happens inside the courtroom. It is an introduction the Public Services CTE pathway.

## **ENTREPRENEURSHIP**

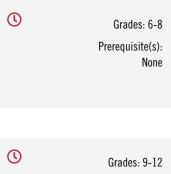
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Prerequisite(s): None

Grades: 9-12

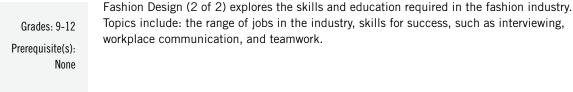
Entrepreneurship (1 of 1) explores entrepreneurial characteristics, business leadership, and the skills and steps involved in marketing, developing, starting, and exiting a business. Key topics and activities include hands-on projects to apply the knowledge as a small business owner and entrepreneur. The course is aligned to the Marketing, Sales, and Services CTE pathway.

## **FASHION DESIGN**



Fashion Design (1 of 2) explores the tools and principles of fashion design. Topics include: the use of color, creation of an inspiration board, fabrics and materials, and tools and machines used by fashion designers.

Prerequisite(s): None



## **GAMING UNLOCKED**

Grades: 9-12 Prerequisite(s): None

Gaming Unlocked (1 of 1) researches the basics of gaming, from what makes games fun to what makes them work by exploring quality in a variety of games such as mental games, board games, and video games.

This course does not require students to know or learn a programming language. The emphasis is on the history and design of games and the different careers available in the game industry.

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### **GRAPHIC & WEB DESIGN**

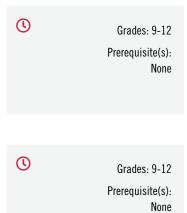
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Prerequisite(s): None

Grades: 9-12

Graphic and Web Design (1 of 1) explores visual communication and explores the range of careers in the field. Topics include: principles of design, ethics of creative fields, and the publishing process.

## **INTERIOR DESIGN**



Interior Design (1 of 2) explores the principles and elements of design. Topics include: skills, roles and responsibilities of interior designers, specialties of interior design, history of design, design materials, furniture, accessories, and modern developments affecting interior design, such as the Americans with Disabilities Act (ADA), universal design, and green design.

Interior Design (2 of 2) explores career options in residential, commercial, and mobile design, getting credentialed, and networking in professional organizations. Topics include: leadership, group dynamics, codes of ethics; lighting, windows, walls, furniture, accessories, textiles, and floor treatments in residential and commercial designs as well as related information on materials, fabrication, and installation; review of the elements and principles of design, the Americans with Disabilities Act (ADA), and universal design.

## **INTRO TO BUSINESS**

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Grades: 9-12 Prerequisite(s): None Developed by a third party 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.

### JOURNALISM

Grades: 9-12 Prerequisite(s): None Developed by a third party This course is designed to prepare you to become a student of journalism and media. The work we do here will equip you with the critical skills you must have to succeed in high school media, college media, and beyond. We will read a variety of journalistic material and do a great deal of news writing. We will also look at journalism from legal, ethical, and historic vantage points. Expect to complete numerous writing activities in a variety of styles including editorial, hard news, feature, review, and more. If you participate actively, you will gain tremendous skills that will serve you for the rest of your 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.

## **PERSONAL FITNESS**

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Grades: 9-12 Prerequisite(s): None <u>Course Intro Video</u> Personal Fitness (1 of 2) explores key concepts from combative sports, gymnastics and tumbling, and a variety of team sports and activities. The focus is on advanced fitness guidelines and cognitive factors that affect performance. Topics include: motor skill development, game strategy, self-evaluation of fitness, setting goals, designing an exercise plan, and tracking results.

Grades: 9-12 Prerequisite(s): None Course Intro Video Personal Fitness (1 of 2) explores how to develop personalized physical fitness plans while completing physical activities throughout the course. Topics include: how to assess fitness levels, modify fitness goals, evaluate fitness products and programs, leadership, and progress tracking in a daily physical activity log.

## **PHOTOGRAPHY BASICS**

Grades: 9-12 Prerequisite(s): None Course Intro Video Photography Basics (1 of 1) explores proper use of photography equipment, how to build a portfolio of work, and describes the steps to starting a career in this field. Topics include: the habits and etiquette of the profession.

\*Photography equipment is not needed. Practice is offered through with digital simulations.

### **PRINCIPLES OF MARKETING**

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Grades: 9-12 Prerequisite(s): None Course Intro Video Principles of Marketing (1 of 1) explores the interactions between businesses, consumers, and the economy as well as the role of marketing and how marketers get their information. The course culminates in the creation of a marketing plan.

## **PROFESSIONAL SALES**

Grades: 9-12 Prerequisite(s): None Course Intro Video Professional Sales (1 of 1) explores the role sales plays in the national economy, the importance of ethical behavior in business. Topics include: how to build, train, motivate, and evaluate a sales team; the role of buying motives; the selling process; and the importance of data. The course is aligned to the Marketing, Sales, and Services CTE pathway.

## **PSYCHOLOGY**

Grades: 9-12 Prerequisite(s): None <u>Course Intro Video</u>

C Grades: 9-12 Prerequisite(s): None Course Intro Video Psychology (1 of 2) explores human behavior, behavior interaction and the progressive development of individuals. Topics include: major theories and orientations of psychology, psychological methodology, human growth and development, individual variation and personality, psychobiology, as well as sensation and perception.

\*This course maybe taken as a full year, or just (1 of 2) for a semester course.

Psychology (2 of 2) explores human social interactions, psychological therapies, and careers in the field. Topics include: psychological perspectives, positive relationships, social and cultural diversity, language structures, memory and cognition, psychological testing, statistical research, stress/coping strategies, and mental health.

### **PUBLIC SPEAKING**

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Prerequisite(s): None Course Intro Video

Grades: 9-12

Public Speaking (1 of 1) explores effective communication skills for success in a variety of speaking situations. Topics include: small and large group discussions, delivery speeches in front of audiences, research and organization, writing for verbal delivery, stylistic choices, visual and presentation skills, analysis and critique, and development of self-confidence.

## SOCIOLOGY

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Grades: 9-12 Prerequisite(s): None Developed by a third party 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

Grades: 9-12 Prerequisite(s): None Developed by a third party 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.

## **THEATER STUDIES**

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Grades: 9-12 Prerequisite(s): None Developed by a third party Have you ever wondered how a play goes from the playwright's mind all the way into a multimillion dollar Broadway production? In this course, you'll 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 you will learn about the definitions of theater, theater history, and contemporary theatrical genres. The second of half of the course will guide you through all of the elements of putting on a professional theatrical production. You will learn about the entire production process, from playwriting through opening night, including elements of technical theater, the rehearsal process, and audience response. Whether you're an aspiring actor, technician, director, or producer, or even just an avid theater-goer, this course is for you.

# **GRADES 9-12 CAREER / TECHNICAL ELECTIVES**

### ADOBE® AFTER EFFECTS®\*

Grades: 9-12 Prerequisite(s): None Developed by a third party Required Materials: Adobe Creative Cloud for Education 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 requires additional software or materials to be purchased by the school.

## **ADOBE® ILLUSTRATOR®\***

Grades: 9-12 Prerequisite(s): None Developed by a third party Required Materials: Adobe Creative Cloud for Education This course introduces students to the Adobe Illustrator and prepares students to take the ACA 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 requires additional software or materials to be purchased by the school.

## ADOBE® INDESIGN®\*

Grades: 9-12 Prerequisite(s): None Developed by a third party Required Materials: Adobe Creative Cloud for Education This course introduces students to the world of Adobe InDesign and prepares students to take the ACA Certification Exam on InDesign. Students will get an insight into what it is like working in the print and digital media publishing industry. Over 10 modules, 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 requires additional software or materials to be purchased by the school.

## ADOBE® PHOTOSHOP®\*

 Grades: 9-12
 Prerequisite(s): None
 Developed by a third party
 Required Materials:
 Adobe Creative Cloud for Education This course prepares students to demonstrate expertise in Adobe's Photoshop software and take the ACA Certification Exam on Photoshop. Students will learn through engaging and interactive content, projects and practice exam items aligned to the learning objectives outlined by Adobe's exam specifications. Students will leave this course with career-ready, real-time skills in one of the most popular software programs in the world!

\*This course requires additional software or materials to be purchased by the school.



### **ADOBE® PREMIERE PRO®\***

Grades: 9-12
Prerequisite(s):
None
Developed by a third party
Required Materials:
Adobe Creative Cloud for Education

This course introduces students to the world of Adobe Premiere Pro. Students will get an insight into the video design and production industry. Over 7 modules, 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 course contains guided tutorials, engaging projects, and great resources that will help students practice and learn how to work in Premiere Pro. This course also prepares students for the Adobe Certified Professional (ACP) Certification Exam on Premiere Pro.

\*This course requires additional software or materials to be purchased by the school.

### **AERONAUTICS AND SPACE TRAVEL**

Grades: 9-12 Prerequisite(s): None Developed by a third party 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.

## **AGRISCIENCE I**

Grades: 9-12
Prerequisite(s):
None
Developed by a third party

## AGRISCIENCE II

Grades: 9-12
Prerequisite(s):
None
Developed by a third party

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, student will explore how they can emerge as leaders in such a complex and exciting industry!

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 quarters 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**

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Grades: 9-12 Prerequisite(s): None Developed by a third party 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**

Grades: 9-12 **Prerequisite(s):** None Developed by a third party **Required Materials:** AutoCAD 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.

\*This course requires additional software or materials to be purchased by the school.

### ARCHITECTURAL DESIGN II +

Grades: 9-12 Prerequisite(s): None Developed by a third party Required Materials: AutoCAD In this course, students will learn various concepts used in the design and architecture field. They will gain an understanding of basic architectural and civil drawings as well as prepare for the Autodesk® Certified User certification in AutoCAD exam. In addition to learning fundamental architectural drawing concepts like creating site plans, floor plans, and electrical plans, students will learn functions of Computer-Aided Drafting (CAD). CAD functions build on the foundation of architectural drawing, using specialized tools for enhancement, layout, and scale. Students will review the essentials of civil drawings including the interpretation and development of topographical illustrations. To round out the course, students will prepare computer-aided drawings to demonstrate utilizing software to perform activities such as drawing site plans, roof plans, and wall sections. Finally, students will be provided an overview of the requirements, structure, and preparation techniques for the Autodesk® Certified User certification in AutoCAD exam.

\*This course requires additional software or materials to be purchased by the school.

## **ARCHITECTURAL DESIGN III**

Grades: 9-12 **Prerequisite(s):** None Developed by a third party **Required Materials:** AutoCAD

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In Architectural Design III, students will review various concepts used in the design and architecture field. They will learn about additional CAD functions, professional ethics, and legal responsibilities as well as explore career options and complete a comprehensive Architectural Design project.

\*This course requires additional software or materials to be purchased by the school.

## AUGMENTED AND VIRTUAL REALITY APPLICATIONS

Grades: 9-12 Prerequisite(s): None Developed by a third party

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 5 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.

## **BUILDING MAINTENANCE TECHNOLOGY I**

_	Grades: 9-12
U	Prerequisite(s):
	None
	Developed by a third party

The 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. Students 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.

## **BUILDING MAINTENANCE TECHNOLOGY II +**

Grades: 9-12 Prerequisite(s): None Developed by a third party

The Building Maintenance Technology II course will focus on construction components, masonry skills, and OSHA. Students will learn about the various masonry and concrete skills as well as safety measures. Some activities will focus on the real-world Application of learned skills with hands-on components. Students will learn about erecting, plumbing, and bracing in relation to concrete as well as laying masonry units. Finally, students will learn important science skills for the construction industry and prepare for OSHA 30-hour Construction certification exam.

## **CAREER EXPLORATION IN DENTISTRY**

Grades: 9-12 Prerequisite(s): None Developed by a third party 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**

Grades: 9-12 Prerequisite(s): None Developed by a third party 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**

None

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#### Grades: 9-12 Prerequisite(s):

Developed by a third party

This course introduces students to the exciting and varied career opportunities in the health care 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.

## **CLOUD TECHNOLOGIES AND THE INTERNET OF THINGS**

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Grades: 9-12

None

Prerequisite(s):

Developed by a third party

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. 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.

## **CONSTRUCTION: FUNDAMENTALS AND CAREERS**

Grades: 9-12 Prerequisite(s): None Developed by a third party

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This course introduces students to the evolving industry of construction! In addition to building on standard concepts such as technical skills, project planning, and regulations, students will learn about the variety of career possibilities within construction. They will also explore the entrepreneurial side of construction and discover what it takes to start and run your own business in this field. Finally, the course will look towards the future and analyze trends in green materials, energy efficiency, and technology to determine how these will impact the homes we build and live in.

## **CYBERSECURITY**

Grades: 9-12
Prerequisite(s):
None
Developed by a third party

In the 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 and 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.

## DRONES: REMOTE PILOT +

Grades: 9-12 Prerequisite(s): None Developed by a third party

This course prepares students to take the Federal Aviation Administration (FAA) Part 107 exam, also know as the Unmanned Aircraft General – Small (UAG) exam, which is essential 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 & requirements, weather, loading & performance, and operations. The course will conclude with a look at the most promising careers in the field of drones.

## EARLY CHILDHOOD EDUCATION I +

Grades: 9-12 Prerequisite(s): None Developed by a third party

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The Early Childhood Education course is designed to provide an overview of the expectations and roles of the early childhood 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, but 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 +

Grades: 9-12 Prerequisite(s): None Developed by a third party The Early Childhood Education II Course is designed to provide an overview of the professional expectations of being an early childhood educator. Throughout the course, students will learn about 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 (DAP) and how to implement these 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. Additionally, this course will prepare students for the Child Development Associate (CDA) certification exam.

## **EDUCATION & TEACHING ADVANCED**

Grades: 9-12 Prerequisite(s): None Developed by a third party

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 +

Grades: 9-12 Prerequisite(s): None Developed by a third party

This course prepares students for the Entrepreneurship and Small Business Certification exam. This certification has been designed to test concepts around starting and managing a small business. These topics include entrepreneurship, evaluation of opportunities, preparation to start a business, operation of a business, marketing, and management of finances. Students gain insights and understand real-world applications that will not only allow them to succeed in passing the certification exam, but also in successfully starting, working in, or running a small business.

## FUNDAMENTALS OF BITCOIN & CRYPTOCURRENCY

Grades: 9-12 Prerequisite(s): None Developed by a third party

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Upon completion of this course, students will understand 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 transaction bitcoin. Key principles such as mining, wallets, and hashing will be introduced. And finally they will be familiarized with the nascent industry of digital currencies and how they function.

## FUNDAMENTALS OF BLOCKCHAIN & CRYPTOGRAPHY

Grades: 9-12  $\bigcirc$ Prerequisite(s): None Developed by a third party Blockchain seems to be the latest buzzword that the business world is talking 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 areas where blockchain has the greatest potential.

## HEALTH MANAGEMENT & INFORMATION SYSTEMS

Grades: 9-12 **(**) Prerequisite(s):

Developed by a third party

None

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.

## INTRODUCTION TO ARTIFICIAL INTELLIGENCE

Grades: 9-12 Prerequisite(s): None Developed by a third party

This course teaches what every student should know about Artificial Intelligence. Al is a fastmoving 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 AI is already being used, and evaluate problem areas of AI, such as bias. The course also contains a balanced look at AI'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.

### JAVA SE 8 ASSOCIATE +\*

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Grades: 9-12 Prerequisite(s): None Developed by a third party Required Materials: Java SE8 The Java SE 8 course is designed to provide preparation for the Oracle Certified Associate (OCA) exam. Throughout the course, students will learn about Java from the basics to string builder methods. They will spend a significant portion of the course learning about the basics of Java, data types, operators, arrays, loop constructs, encapsulation, inheritance, exceptions, and API.

\*This course requires additional software or materials to be purchased by the school.

## LEED GREEN ASSOCIATE +

C Grades: 9-12 Prerequisite(s): None Developed by a third party Course Intro Video Coming Soon! 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. Additionally, this course prepares student for the LEED Green Certified Associate certification exam.

### MICROSOFT EXCEL +\*

Grades: 9-12 **Prerequisite(s):** None Developed by a third party **Required Materials:** Microsoft 365

This course introduces students to the world of Microsoft Excel. Students will get an insight into the use of the product within the business setting. Over 8 modules, students will learn everything from absolute basics like navigating Microsoft Excel to performing complex tasks like formulas and functions. This course prepares students for the Microsoft Office Associate: Microsoft Excel Certification.

\*This course requires additional software or materials to be purchased by the school.

### **MICROSOFT OUTLOOK\***

	Grades: 9-12
J	Prerequisite(s):
	None
	Developed by a third party
	<b>Required Materials:</b>
	Microsoft 365

In this course, students will navigate Microsoft Outlook, which is the preferred email client for sending and receiving emails from the Microsoft Exchange Server. Outlook includes access to contact, email, calendar, and task management tools. Microsoft Outlook is a component of Office 365 and the Microsoft Office suite, including Microsoft Excel and PowerPoint. From fundamental processes like adding an account to more complex tasks such as customizing features to better accommodate specific needs, students will explore all that Microsoft Outlook can do.

\*This course requires additional software or materials to be purchased by the school.

### MICROSOFT POWERPOINT +\*

Grades: 9-12 Prerequisite(s): None Developed by a third party Required Materials: Microsoft 365

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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 Associate Microsoft PowerPoint Certification.

\*This course requires additional software or materials to be purchased by the school.

## MICROSOFT WORD +\*

Grades: 9-12 Prerequisite(s): None Developed by a third party Required Materials: Microsoft 365

### NETWORKING +

Grades: 9-12 Prerequisite(s): None Developed by a third party 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. Over 11 modules, students progress from absolute basics like navigation to performing complex tasks like graphic elements and collaboration. This course prepares students for the Microsoft Office Associate Microsoft Word Certification.

\*This course requires additional software or materials to be purchased by the school.

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) certification exam.

## PERSONAL FINANCE

_	Grades: 9-12
U	Prerequisite(s):
	None
	Developed by a third party

The Personal Finance course is intended to prepare students to be successful financial citizens. They will learn their role and responsibilities as a responsible financial planner and saver as well as learn about the services, functions, and products of the financial industry. In addition, they will make informed buying decisions and understand personal taxation, wills, insurance, and contracts. Finally, they will learn about saving and investing as well as consumer credit and loans.



## **PROJECT MANAGEMENT +**

Grades: 9-12 Prerequisite(s): None Developed by a third party 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.

## QUICKBOOKS\*

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Grades: 9-12 Prerequisite(s): None Developed by a third party Required Materials: Quickbooks In this course, students will explore how to start using QuickBooks 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.

\*This course requires additional software or materials to be purchased by the school.

## **ROBOTICS: APPLICATIONS AND CAREERS**

Grades: 9-12 Prerequisite(s): None Developed by a third party

It seems like many elementary to high school robotics courses are focused on coding a simple 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 10 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

Grades: 9-12 Prerequisite(s): None Developed by a third party

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 Internet of Things devices. The course will conclude with an analysis of careers related to smart cities.

## SOCIAL MEDIA BUSINESS MARKETING +

Grades: 9-12 Prerequisite(s): None Developed by a third party

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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**

Grades: 9-12 Prerequisite(s): None Developed by a third party 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.

### **SWIFT APP DEVELOPMENT\***

Grades: 9-12 Prerequisite(s): None Developed by a third party Required Materials: Swift

In this course, students will learn about Swift App development and its components. Apple developed the powerful and user-friendly programming language Swift for creating iOS, Mac, Apple TV, and Apple Watch apps. Developers have more freedom than ever before, and the open-source app allows anyone with an idea to create something incredible. From planning to navigation to building, students will learn how to take an idea and create something potentially revolutionary!

\*This course requires additional software or materials to be purchased by the school.

### **TEACHING AS A PROFESSION**

Grades: 9-12 Prerequisite(s): None Developed by a third party

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.

## THE HISTORY OF GAMING AND ESPORTS

Grades: 9-12 Prerequisite(s): None Developed by a third party 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.

### TRANSPORTATION TECHNOLOGIES

Grades: 9-12 Prerequisite(s): None Developed by a third party 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 10 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

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Grades: 9-12

Prerequisite(s):

Developed by a third party

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.

# **GRADES 9-12 CAREER / TECHNICAL ELECTIVES**

## EARTH SCIENCE

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Grades: 9-12 Prerequisite(s): None Accelerate The first three modules of Semester 1 cover Scientific Inquiry, the Structure and Composition of the Universe, and the Features of the Solar System. Students learn the importance of scientific inquiry and how to communicate the results of scientific investigations. They then have material on the formation of the universe, including the Big Bang Theory, the motions of celestial objects, and stellar evolution. The third module covers material related to the Solar System, including features of the Sun and the planets and the movements of Earth. The second three modules of Semester 1 cover Weather, Climate, and Earth's Water Cycle. Students first learn in Module 4 about the atmosphere and clouds, as well as the factors that influence local and global climate. In Module 5 they continue by learning about weather and air masses, meteorology and storms. Module 6 then discusses the water cycle, including groundwater and ocean features, as well as water scarcity and pollution.