COPPERSTONE
EDUCATION
ACCELERATE REAL WORLD SUCCESS THROUGH VIRTUAL LEARNING

COURSE CATALOG

HIGH SCHOOL

2024-2025

Through innovation, collaboration, and exceptional talent, we inspire and empower young adults by providing access to the knowledge, skills, and values necessary to succeed in a rapidly evolving world.

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COPPERSTONE EDUCATION
ACCELERATE REAL WORLD SUCCESS THROUGH VIRTUAL LEARNING

US High School Graduation Requirements

College Prep Diploma Program - 20 Credits

Our College Preparatory track is for students needing a rigorous study program in preparation for post-secondary education. Copperstone Education follows the University of California system for course requirements for graduation. These are subject to change. Our registrar's office maintains the most current requirements to ensure our students are ready for their post-high school endeavors.

- English — 4 Credits
- Math — 4 Credits
- Sciences — 3 Credits
- Social Studies — 3 Credits
- Physical Education / Health — 2 Credits
- Visual and Performing Arts — 1 Credit
- World Languages — 2 Credits
- Electives — 1 Credit

General Education Diploma Program - 13 Credits

Our General Studies track is for students not planning on attending a four-year university directly after high school graduation. With the general studies diploma, students can attend a community college or trade school, or go straight into the workforce. The requirements for our general studies diploma are significantly less than the college prep diploma.

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- English — 3 Credits
- Math — 2 Credits
- Sciences — 2 Credits
- Social Studies — 3 Credits
- Physical Education / Health — 2 Credits
- Visual and Performing Arts — 1 Credit
- World Languages — NA
- Electives — NA

Social Studies

1960s America

The 1960s America course gives students a look at life during this exciting and monumental decade. This course covers the social, political, and cultural movements and changes that occurred in the 1960s. Students explore different historical events and determine how these events impacted American citizens during the decade and afterward. The course also focuses on significant headlines of the 1960s to give students a realistic perspective of this decade.

Primary Grade: 11

Grade Range: 10, 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

African American History

African American History is a survey course that spans the history of America, including ancient African society and culture through the presidency of Barack Obama. Students examine the African American struggle to secure their constitutional rights. This course explores the powerful and influential role of African Americans in U.S. history.

Primary Grade: 11

Grade Range: 10, 11, 12
Half-Year, Semester Based: 0.5 credit
NCAA Eligible

Civics and Government

Civics and Government offers students an introduction to the foundation of the democratic government of the U.S. and the basic principles of the judicial system. In this course, students explore what it means to be a citizen, as well as the structure of the legislative, executive, and judicial branches of the U.S. government. Students learn about how these branches work together. Students also look at the characteristics of state and local governments throughout the country to examine the organization and responsibilities of these branches. Students also explore the components of the American economy, including its foundations and how it interacts with other economies of the world.

Primary Grade: 11

Grade Range: 10, 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

Civics and Government - Credit Recovery

Civics and Government offers students an introduction to the foundation of the democratic government of the U.S. and the basic principles of the judicial system. In this course, students explore what it means to be a citizen, as well as the structure of the legislative, executive, and judicial branches of the U.S. government. Students learn about how these branches work together. Students also look at the characteristics of state and local governments throughout the country to examine the organization and responsibilities of these branches. Students also explore the components of the American economy, including its foundations and how it interacts with other economies of the world.

Primary Grade: 11

Grade Range: 10, 11, 12
Full-Year, Semester Based: 1 credit

Economics

Economics presents an overview of microeconomics and macroeconomics. It discusses economic theories, economic systems, various economic concepts, and the global economy. Students will examine the economy of the United States in depth and compare it to other economies. Students will also explore personal banking and how to prepare for their financial future.

Primary Grade: 12

Grade Range: 11, 12
Full-Year, Semester Based: 1 credit

Financial Literacy

In Financial Literacy, students explore aspects of personal finance. The course focuses on ways of earning income, spending, saving, investing, managing credit, and managing risk using real-world applications. These concepts will help students prepare for their financial futures.

Primary Grade: 12

Grade Range: 9, 10, 11, 12
Half-Year, Semester Based: 0.5 credit

Law

In the Law course, students examine citizen obligations to law enforcement, the court system, and the rules and regulations that all Americans are expected to uphold. They explore the terminology and the regulations that structure and control society. Students study different types of crime and the law enforcement powers that are put in place to regulate and diminish overall crime. Students who are interested in a law career will benefit from learning the law and justice terminology presented in this course. Warning: This content contains subject matter that may be considered offensive or graphic.

Primary Grade: 12

Grade Range: 11, 12
Half-Year, Semester Based: 0.5 credit
NCAA Eligible

Political Science

Political Science is an introduction to political science as an academic discipline. Students discover the origin, creation, and function of different political systems within the United States and across the globe. Students explore political theories, such as systems theory and the social contract theory. Additionally, students examine economic concepts, how countries interact with one another, international governmental organizations and nongovernmental organizations, and the role of media in politics while developing skills in research methodology.

Primary Grade: 12

Grade Range: 11, 12
Half-Year, Semester Based: 0.5 credit
NCAA Eligible

Psychology

In Psychology, students explore the science of explaining and controlling human behavior. Psychology plays an integral part in everyday life because all decisions, relations, and emotions are closely tied to behavior and genetics. Within this course, students look at behavior, and they consider prominent psychologists who have made impressive and monumental discoveries through testing, research projects, and proving theories. Students will study everything from the anatomy of the brain to psychological disorders.

Primary Grade: 12

Grade Range: 11, 12
Half-Year, Semester Based: 0.5 credit
NCAA Eligible

Sociology

In the Sociology course, students explore the various topics and sociological terminology necessary for understanding and exploring the field. Students investigate major sociological perspectives and the famous sociologists who invented and contributed to them. Additionally, students determine how researchers perform valid and reliable sociological studies. This course is ideal for students who are interested in pursuing post-secondary careers in sociology, psychology, law, or other social sciences.

Primary Grade: 12

Grade Range: 11, 12
Half-Year, Semester Based: 0.5 credit
NCAA Eligible

U.S. History I

In U.S. History I, students will explore United States history from the European settlement of North America through Reconstruction. Students investigate North America's colonization, the transition from British colonies to an independent United States, and the Civil War and reunification. The course offers numerous rigorous, interactive options for students to conduct an in-depth review of key events and concepts in U.S history.

Primary Grade: 9

Grade Range: 9, 10
Full-Year, Semester Based: 1 credit
NCAA Eligible

U.S. History II

In U.S. History II, students will explore United States history from the post-Reconstruction era to the present. This course allows students to investigate the expansion of the United States' economy, government, culture, and foreign policy. Students will analyze cultural movements and influential legislation. The course offers numerous interactivity options for students to dive deeper into key events and concepts in U.S history.

Primary Grade: 9

Grade Range: 9, 10, 11
Full-Year, Semester Based: 1 credit
NCAA Eligible

World Cultures

World Cultures explains global geography, history, and culture to students. In this course, students study the major political powers of each era and discover how the world's earliest civilizations developed through the Age of Exploration to the Industrial Revolution. In the second half of the course, students examine a world at war, navigating World War I, nationalist movements in Russia and Asia, World War II, the Cold War, independence from imperial and communist rule, and struggles for democracy. The course closes with discussions of current global issues such as terrorism, technology, the economy, pollution, and renewable energy.

Primary Grade: 10

Grade Range: 9, 10, 11
Full-Year, Semester Based: 1 credit
NCAA Eligible

World Geography

In World Geography, students explore the principles and tools of geography while examining the world as geographers. Students gain cultural perspectives by exploring the physical and human geographic aspects of each continent and its regions. This enables students to analyze cultures throughout the world and examine how the global community impacts their lives.

Primary Grade: 10

Grade Range: 9, 10, 11
Full-Year, Semester Based: 1 credit
NCAA Eligible

World History

World History allows students to investigate significant events, people, and places from prehistoric to modern times. Studying world history allows students to consider the historical relevance of people, places, and events. In this wide-ranging course, students learn how the world and its inhabitants were shaped over time, and, in the process, gain a better understanding of the role that geography plays in world history.

Primary Grade: 10

Grade Range: 9, 10, 11
Full-Year, Semester Based: 1 credit
NCAA Eligible

Economics - Honors

In Economics Honors, students are challenged to master more in-depth content, tied to appropriate academic standards, in the same period as a traditional course, with a high level of rigor in both requirements and assessments. Economics presents an overview of microeconomics and macroeconomics. It discusses economic theories, economic systems, various economic concepts, and the global economy. Students will examine the economy of the United States in depth and compare it to other economies. Students will also explore personal banking and how to prepare for their financial future.

Primary Grade: 12

Grade Range: 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

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Primary Grade: 10

Grade Range: 9, 10, 11
Full-Year, Semester Based: 1 credit
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World Geography - Honors

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Primary Grade: 10

Grade Range: 9, 10, 11
Full-Year, Semester Based: 1 credit
NCAA Eligible

U.S. History I - Honors

In U.S. History I Honors, students are challenged to master more in-depth content, tied to appropriate academic standards, in the same period as a traditional course, with a high level of rigor in both requirements and assessments. In U.S. History I, students will explore United States history from the European settlement of North America through Reconstruction. Students investigate North America's colonization, the transition from British colonies to an independent United States, and the Civil War and reunification. The course offers numerous rigorous, interactive options for students to conduct an in-depth review of key events and concepts in U.S history.

Primary Grade: 9

Grade Range: 9, 10
Full-Year, Semester Based: 1 credit
NCAA Eligible

U.S. History II - Honors

In U.S. History II Honors, students are challenged to master more in-depth content, tied to appropriate academic standards, in the same period as a traditional course, with a high level of rigor in both requirements and assessments. In United States History II students continue to study United States history by exploring important historical moments from the Reconstruction era through the end of World War II. Students learn about the industrialization of this growing nation and the economic and social changes it underwent as the nation transitioned from an agricultural society to an industrial society. Students also analyze the challenges the nation faced as it was forced to choose between isolation and involvement in international armed conflicts. This course guides students as they interpret the extraordinary changes the nation went through after the American Civil War and examine how those changes ultimately led to the United States' emergence as an international power at the conclusion of World War II.

Primary Grade: 9

Grade Range: 9, 10, 11
Full-Year, Semester Based: 1 credit
NCAA Eligible

English Language Arts

African American Literature

African American Literature is a survey course that spans the history of America as it relates to the lives of African Americans. Students explore the forcible transport of individuals from Africa to America, the publication of narratives of enslaved men and women, the abolition of slavery under President Lincoln, the civil rights movement, and the presidency of Barack Obama. Students explore the powerful and influential roles that African Americans have played in U.S. history. They will discover the contributions of African American activists, artists, and authors through literature and nonfiction texts such as biographies, autobiographies, memoirs, court cases, historical texts, and litigations.

Primary Grade: 11

Grade Range: 11, 12
Half-Year, Semester Based: 0.5 credit
NCAA Eligible

American Literature

In American Literature, students explore various cultural periods of American literature. They examine numerous aspects of Romanticism, literature from multiple historical eras of the United States, and contributions made by significant American leaders. In addition to discovering multiple genres and investigating numerous periods of writing, students also explore the basics of literature, writing, and grammar.

Primary Grade: 12

Grade Range: 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

British Literature

British Literature provides students with a survey of literature in this genre. Students explore the Anglo-Saxon and medieval eras, the English Renaissance, and the Restoration and Enlightenment periods. They analyze how authors from this region have traditionally constructed texts and developed prominent and long-lasting literature. In this course, students examine a variety of styles and use the vocabulary that is characteristic of literature pieces they are reading. This course offers students numerous chances to discuss, analyze, synthesize, and evaluate the texts they read through a wide range of writing and thinking exercises.

Primary Grade: 12

Grade Range: 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

Communications

In Communications, students explore various aspects of communication. They will investigate the foundations of communication by analyzing, applying, and designing creative works essential to the professional communications industry. This course establishes a comprehensive foundation for students interested in a post-secondary career in communications.

Primary Grade: 11

Grade Range: 11, 12
Half-Year, Semester Based: 0.5 credit

Creative Writing

Creative Writing is a course in which students discover, analyze, and apply the methods and styles used in various forms of fiction, creative nonfiction, drama, and poetry. It emphasizes experimentation and practice, and it encourages students to take cues from published writers and poets. Students express themselves while learning various genres and their respective writing rules. Students also explore related topics, including word choice, diction, form, editing, idea generation, and other skills useful in nonfiction writing. Students do a great deal of writing in this course.

Primary Grade: 12

Grade Range: 11, 12
Half-Year, Semester Based: 0.5 credit
NCAA Eligible

Debate

In the Debate course, students learn crucial debate terminology, speech strategies, and persuasive techniques. Students investigate rhetoric and learn to consider multiple and divergent perspectives. Throughout this course, students develop the skills necessary to execute a well-versed and effectively supported argument. This study of supporting claims with credible evidence will allow students to engage in effective persuasive discourse.

Primary Grade: 11

Grade Range: 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

English Grammar

Students enrolled in English Grammar explore basic, intermediate, and advanced concepts of grammar, language, style, and composition. By analyzing word meaning and function, students will generate content using appropriate grammatical expressions. Students will examine provided writing samples and their own compositions to enhance their skills.

Primary Grade: 10

Grade Range: 9, 10
Half-Year, Semester Based: 0.5 credit

English Language Arts 10

In English Language Arts 10, students focus on literature, grammar, and composition. They examine words and their meanings and apply this information to other concepts in the course. Students analyze the different elements of a story, including plot, setting, character, narrator, and voice. Additionally, throughout the course, students study various parts of speech, readings, and poetry. English Language Arts 10 also presents students with many different types and styles of writing in order to provide a thorough examination of language and literature. Students apply these styles to their own writing as well.

Primary Grade: 10

Grade Range: 9, 10
Full-Year, Semester Based: 1 credit
NCAA Eligible

English Language Arts 9

English Language Arts 9 utilizes works of fiction and nonfiction from classic to modern times to introduce students to key literary elements. Students develop skills in literary analysis and interpretation by reading and examining plot, setting, character, narrator, voice, tone, mood, symbolism, irony, and other literary elements. In addition, students examine form, style, and persuasion in nonfiction works. In this course, students strengthen their vocabulary, grammar skills, and use of mechanics. They also focus on mastering the stages of the writing process and further developing their research and presentation skills.

Primary Grade: 9

Grade Range: 9, 10
Full-Year, Semester Based: 1 credit
NCAA Eligible

Exploring Cinema

Exploring Cinema introduces students to film-making and cinematic productions. In this course, students explore the technology used to create a film and begin to build an aesthetic appreciation of films. Students also explore media art and the ethics of media creation, giving them a wider perspective on the different ways material can be presented.

Primary Grade: 12

Grade Range: 11, 12
Half-Year, Semester Based: 0.5 credit

Greek and Roman Mythology

In Greek and Roman Mythology, students explore myths from Greece and Rome. They examine the history of mythology and some of the key gods and goddesses. Students learn to connect the cultures of ancient Greece and Rome with the culture of today. Throughout this course, students use technology and artistic practices to express their knowledge. In addition, they explore vocabulary, literary, and narrative elements, in addition to writing through the lens of mythology. Students work through the process of writing myths of their own through planning, drafting, revising, and publishing.

Primary Grade: 10

Grade Range: 9, 10
Full-Year, Semester Based: 1 credit
NCAA Eligible

Introduction to College Writing

Introduction to College Writing prepares students to create freshman writing pieces as they move toward their post-secondary education. In this course, they learn the skills necessary to build a solid foundation for basic college writing as they focus on informative and persuasive writing. Students practice organization, tone, and style in their work to ensure that they are well-rounded and skilled writers. Finally, students discover how to locate and present research and evidence in a logical, well-organized manner.

Primary Grade: 12

Grade Range: 11, 12
Half-Year, Semester Based: 0.5 credit
NCAA Eligible

Media Writing

Media Writing is designed for students who are interested in careers in broadcast journalism, communications, or media. In this course, students explore the basics of media writing in addition to careers in print, online, and broadcast media. Students investigate the numerous styles of writing for a number of applications, including newspapers, magazines, audio broadcasts, video broadcasts, and the Internet. In addition, students practice researching, locating, and using sources that are reliable and valid.

Primary Grade: 12

Grade Range: 11, 12
Half-Year, Semester Based: 0.5 credit

Poetry

Poetry is a course for students who are interested in learning more about different types of poetry and writing their own poetry. In Poetry, students explore the elements of a poem, including theme, poetic devices, rhyme, meter, and word choice. Students evaluate different poetic structures and draft and create their own poems in these structures. In this course, students use evidence to support analysis, conduct research, and write research papers.

Primary Grade: 10

Grade Range: 9, 10
Half-Year, Semester Based: 0.5 credit
NCAA Eligible

Short Stories

Short Stories exposes students to the basic characteristics, writing style, and literary elements of a story. From characters, point of view, and setting to techniques such as suspense and irony, students learn how short stories provide readers with the opportunity to experience different storylines in a precise and defined format. Students become acquainted with the compact nature of the short story literary form and each author's ability to weave exciting, interesting narratives in such short, tight spaces. Students learn the importance of being concise, recognizing that good literature does not necessarily have to be lengthy in order to be captivating.

Primary Grade: 10

Grade Range: 9, 10
Half-Year, Semester Based: 0.5 credit
NCAA Eligible

Technical Writing

Written-communication skills and professional documentation are central to the Technical Writing course. This course enables students to analyze a variety of real-world documents and allows them to perfect their technical writing abilities. Students encounter numerous types of technical writing, including journal writing, email drafting, persuasive writing, memo creation, letter drafting, and marketing and advertising, allowing them to build upon their own technical writing skills and knowledge. Students are also given an assortment of project- based assignments throughout the course.

Primary Grade: 10

Grade Range: 9, 10
Half-Year, Semester Based: 0.5 credit

World and Cultural Mythology

World and Cultural Mythology is the perfect course for students looking for an interactive way to learn about mythology and myths from around the world. The course focuses on different dynamics of myths and analyzes aspects of myths found in different cultures. The course looks at the type of writing styles used in different myths, including common terminology, sentence structure, and writing techniques. Finally, students evaluate mythical places and sacred locations, including the characters commonly found in myths, such as gods, goddesses, monsters, heroes, and deities.

Primary Grade: 12

Grade Range: 11, 12
Half-Year, Semester Based: 0.5 credit
NCAA Eligible

World Literature

In World Literature, students explore a wide variety of literary styles, artists, and mediums from cultures and societies around the globe. Students analyze different forms of writing, including fiction and nonfiction, and they evaluate how authors from different areas, religious backgrounds, genders, and cultures use the written word to express thoughts and opinions and tell poignant stories.

Primary Grade: 11

Grade Range: 11, 12
Half-Year, Semester Based: 0.5 credit
NCAA Eligible

English Language Arts 9 - Honors

In English Language Arts 9 Honors, students are challenged to master more in-depth content, tied to appropriate academic standards, in the same period as a traditional course, with a high level of rigor in both requirements and assessments. English Language Arts 9 utilizes works of fiction and nonfiction from classic to modern times to introduce students to key literary elements. Students develop skills in literary analysis and interpretation by reading and examining plot, setting, character, narrator, voice, tone, mood, symbolism, irony, and other literary elements. In addition, students examine form, style, and persuasion in nonfiction works. In this course, students strengthen their vocabulary, grammar skills, and use of mechanics. They also focus on mastering the stages of the writing process and further developing their research and presentation skills.

Primary Grade: 9

Grade Range: 9
Full-Year, Semester Based: 1 credit
NCAA Eligible

English Language Arts 10 - Honors

In English Language Arts 10 Honors, students are challenged to master more in-depth content, tied to appropriate academic standards, in the same period as a traditional course, with a high level of rigor in both requirements and assessments. In English Language Arts 10, students focus on literature, grammar, and composition. They examine words and their meanings and apply this information to other concepts in the course. Students analyze the different elements of a story, including plot, setting, character, narrator, and voice. Additionally, throughout the course, students study various parts of speech, readings, and poetry. English Language Arts 10 also presents students with many different types and styles of writing in order to provide a thorough examination of language and literature. Students apply these styles to their own writing as well.

Primary Grade: 10

Grade Range: 10
Full-Year, Semester Based: 1 credit
NCAA Eligible

American Literature - Honors

In American Literature Honors, students are challenged to master more in-depth content, tied to appropriate academic standards, in the same period as a traditional course, with a high level of rigor in both requirements and assessments. In American Literature, students explore various cultural periods of American literature. They examine numerous aspects of Romanticism, literature from multiple historical eras of the United States, and contributions made by significant American leaders. In addition to discovering multiple genres and investigating numerous periods of writing, students also explore the basics of literature, writing, and grammar.

Primary Grade: 12

Grade Range: 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

British Literature - Honors

In British Literature Honors, students are challenged to master more in-depth content, tied to appropriate academic standards, in the same period as a traditional course, with a high level of rigor in both requirements and assessments. British Literature provides students with a survey of literature in this genre. Students explore the Anglo-Saxon and medieval eras, the English Renaissance, and the Restoration and Enlightenment periods. They analyze how authors from this region have traditionally constructed texts and developed prominent and long-lasting literature. In this course, students examine a variety of styles and use the vocabulary that is characteristic of the literature pieces they are reading. This course offers students numerous chances to discuss, analyze, synthesize, and evaluate the texts they read through a wide range of writing and thinking exercises.

Primary Grade: 12

Grade Range: 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

Mathematics

Algebra I

In Algebra I, students explore roots, function patterns, graphs, equations, and inequalities. They will also transform and compare functions. Students will describe and translate graphic, algebraic, numeric, and verbal representations of relations and use those relationships to solve problems. Students will develop computational, procedural, and problem-solving skills throughout this course, building a solid foundation for further studies in mathematics.

Primary Grade: 9

Grade Range: 8, 9, 10
Full-Year, Semester Based: 1 credit
NCAA Eligible

Algebra II

In Algebra II, students analyze situations verbally, numerically, graphically, and symbolically. Students solve equations and inequalities. They extend their knowledge of algebraic expressions, absolute value, functions, and graphs. This course prepares students for more difficult mathematical concepts and content.

Primary Grade: 11

Grade Range: 9, 10, 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

Applied Mathematics

Applied Mathematics covers the fundamental mathematics necessary for students to obtain a broad range of skills. Although problems in this course apply to a variety of topics from Algebra to Geometry, emphasis is given to real-world applications. Students write and solve linear equations to represent situations such as the value of a car or the distance that a plane travels during a trip. They also learn to solve quadratic equations and find the maximum value of quadratic equations. Students explore area, perimeter, and volume, and then they apply these concepts to situations such as building a swimming pool. Students calculate conversions between the U.S. customary system of measurements and the metric system. Geometry concepts presented in this course include the Pythagorean Theorem, using similar triangles, finding dimensions, and interpreting scale on a map. Finally, students use statistical concepts to interpret data sets and turn those data sets into graphical representations.

Primary Grade: 10

Grade Range: 9, 10, 11, 12
Full-Year, Semester Based: 1 credit

Business Mathematics

In Business Mathematics, students discover a variety of basic mathematical concepts and tools for real-word mathematical application including algebraic equations, formulas, operations using fractions, decimals, and percentages. This course shows students how to work with percentages to solve application problems and how to research investment and insurance options. Students learn to graph a function from an equation, and they work with ratios and proportions. Additionally, students explore the proper methods of preparing and analyzing income statements and balance sheets. They also study the ways in which to calculate real estate loan payments, and they learn to read and interpret graphs to represent data in the business world. This course also discusses mean, median, and mode as it relates to the distribution of data.

Primary Grade: 11

Grade Range: 9, 10, 11, 12
Full-Year, Semester Based: 1 credit

Calculus

Calculus evaluates higher-level mathematics through analytical/algebraic, numerical, graphical, and verbal methods. Students study various components of mathematics, including the investigation of trigonometric functions, probability, and series. Students will strengthen their skills with Pre-Calculus and Trigonometry concepts in preparation for post-secondary coursework. Having a strong calculus knowledge base supports all students, but mostly those students who are interested in careers in the mathematics and engineering fields.

Primary Grade: 12

Grade Range: 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

Consumer Mathematics

In Consumer Mathematics, students learn mathematical concepts that they will use in their daily lives. They focus on real-world topics that require addition, subtraction, multiplication, and division of whole numbers, as well as fractions, decimals, ratios, proportions, and percentages. Students also explore the ways in which real-life activities such as traveling, purchasing a new car or house, or even installing new carpeting relates to mathematics. Consumer Mathematics relates everyday mathematics concepts to concrete definitions, processes, and many real-life situations.

Primary Grade: 11

Grade Range: 9, 10, 11, 12
Full-Year, Semester Based: 1 credit

Geometry

In Geometry, students explore the relationships that exist within geometric figures, such as triangles, circles, and quadrilaterals. Students analyze the relationships and use mathematical postulates and theorems to write proofs. The explored relationships are also used to solve mathematical and real-world problems and to perform geometric constructions. The students are introduced to the concept of probability and to parabolas.

Primary Grade: 10

Grade Range: 9, 10, 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

Pre-Calculus

In Pre-Calculus, students develop a deeper and more thorough understanding of functions and graphs. Graphs that students study range from polynomial and rational to exponential, logarithmic, and trigonometric. Some exponential and logarithmic topics discussed in this course are change of base formulas, properties of logs, growth and decay, and logistic growth models.

Primary Grade: 11

Grade Range: 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

Probability and Statistics

Students enrolled in Probability and Statistics build a strong foundation in calculating probabilities and evaluating statistics. The Probability and Statistics curriculum is designed to cover a half year of instruction but can be completed at each student's own pace. Students enrolled in the course explore representation of statistical data, working with scatter plots, analyzing statistical data using properties and theorems, and more.

Primary Grade: 11

Grade Range: 11, 12
Half-Year, Semester Based: 0.5 credit
NCAA Eligible

Trigonometry

Trigonometry is offered for students who want to continue a rigorous study of mathematics. The course begins by reviewing the real number system, characteristics of functions, and solving equations. Topics from right-triangle trigonometry lead to an in-depth study of the unit circle and trigonometric functions, their graphs, and their inverses. In their study of analytic trigonometry, students verify identities and solve trigonometric equations. The course covers the Law of Cosines, the Law of Sines, and vectors. It closes with a complete study of conics, parametric equations, and polar curves. Before enrolling in this course, students should have completed Algebra II and Geometry.

Primary Grade: 11

Grade Range: 11, 12
Half-Year, Semester Based: 0.5 credit
NCAA Eligible

Geometry - Honors

In Geometry Honors, students are challenged to master more in-depth content, tied to appropriate academic standards, in the same period as a traditional course, with a high level of rigor in both requirements and assessments. In Geometry, students explore the relationships that exist within geometric figures, such as triangles, circles, and quadrilaterals. Students analyze the relationships and use mathematical postulates and theorems to write proofs. The explored relationships are also used to solve mathematical and real-world problems and to perform geometric constructions. The students are introduced to the concept of probability and to parabolas.

Primary Grade: 10

Grade Range: 9, 10, 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

Algebra I - Honors

In Algebra I Honors, students are challenged to master more in-depth content, tied to appropriate academic standards, in the same period as a traditional course, with a high level of rigor in both requirements and assessments. In Algebra I, students explore roots, function patterns, graphs, equations, and inequalities. They will also transform and compare functions. Students will describe and translate graphic, algebraic, numeric, and verbal representations of relations and use those relationships to solve problems.

Primary Grade: 9

Grade Range: 8, 9, 10
Full-Year, Semester Based: 1 credit
NCAA Eligible

Algebra II - Honors

In Algebra II Honors, students are challenged to master more in-depth content, tied to appropriate academic standards, in the same period as a traditional course, with a high level of rigor in both requirements and assessments. In Algebra II, students analyze situations verbally, numerically, graphically, and symbolically. Students solve equations and inequalities. They extend their knowledge of algebraic expressions, absolute value, functions, and graphs. This course prepares students for more difficult mathematical concepts and content.

Primary Grade: 11

Grade Range: 9, 10, 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

Pre-Calculus - Honors

In Pre-Calculus Honors, students are challenged to master more in-depth content, tied to appropriate academic standards, in the same period as a traditional course, with a high level of rigor in both requirements and assessments. In Pre-Calculus, students develop a deeper and more thorough understanding of functions and graphs. Graphs that students study range from polynomial and rational to exponential, logarithmic, and trigonometric. Some exponential and logarithmic topics discussed in this course are change of base formulas, properties of logs, growth and decay, and logistic growth models.

Primary Grade: 11

Grade Range: 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

Science

Anatomy and Physiology

Anatomy and Physiology allows students to discover the fascinating dynamics of the human body. Students begin by exploring the history of anatomy, essential anatomical terminology, and the hierarchical organization of the human body. Next, students are introduced to basic biochemistry and cellular processes, which includes a virtual tour of the cell. Students also investigate the structure, function, hierarchy, and diseases associated with each organ system. Completion of one full year of high school Biology is required in order to understand the numerous biological concepts presented in this course.

Primary Grade: 12

Grade Range: 10, 11, 12
Half-Year, Semester Based: 0.5 credit
NCAA Eligible

Astronomy

In Astronomy, students begin by discussing basic astronomical concepts and discoveries throughout history. They take an in-depth look at the first moments of the universe by studying the Big Bang. From there, they investigate the evolution of the universe, beginning with the first atoms and moving on to explore elements, stars, solar systems, and galaxies. Students gather information to determine if there is a possibility of life on other planets and in other solar systems. Students analyze the major space missions that have led to the modern study of cosmology, and they explore the possibilities of where this field may take scientists in the future.

Primary Grade: 11

Grade Range: 10, 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

Biology

Biology follows the adventures of two Lincoln High School students, Zeke and Chloe, as they explore the fascinating world of the biological sciences. As members of the BioLINC Club, organized by their teacher Mr. Quinn, they attend field trips and conduct laboratory activities to learn more about topics in Biology. Students begin by exploring the foundations of biology, the chemistry of life, and the structure and function of cells. Then, they dive into the basics of cellular energy, including photosynthesis and cellular respiration. Next, cellular development and reproduction are explored, including mitosis and meiosis. The principles of heredity and the manipulation and testing of DNA are also examined. Semester one concludes with a look at the history of life, including the fossil record and geologic time scale. During semester two, students investigate the principles of evolution and how populations change over time. Students continue by studying the basics of ecology and how organisms are intertwined within communities. The ecosystems within the biosphere are explored, as well as the impacts humans have on Earth's environment. Next, the classification system used to categorize organisms on Earth is explored, and the behaviors of animals are studied. Finally, the course culminates with a look at how organisms maintain homeostasis and how human body systems work.

Primary Grade: 9

Grade Range: 9, 10
Full-Year, Semester Based: 1 credit
NCAA Eligible

Chemistry

Chemistry takes students on a journey with Elena Gilbert, a crime scene investigation intern, who applies the fundamentals of chemistry to CheMYSTERY crime scene investigations at the conclusion of each topic. The journey begins with an exploration of scientific practices, laboratory safety guidelines, and measurement skills. Next, students work through the properties of matter, atomic theory and structure, and quantum mechanics. The history and organization of the periodic table precedes exploring the basics of chemical bonding, rules for naming compounds, proper construction of chemical formulas, and methods of chemical quantification. Semester one concludes by investigating the types of chemical reactions and balancing chemical equations. During semester two, students begin with conducting stoichiometric calculations, studying the behavior of gases, and investigating the nature of solutions. Next, the world of thermochemistry is explored, as well as the concept of equilibrium. Students continue into an investigation of acids, bases, and salts and the concept of oxidation-reduction reactions. The course culminates with a look at specialty areas of chemistry, including nuclear chemistry, organic chemistry, biochemistry, and electrochemistry. As a prerequisite to Chemistry, students must have completed Algebra I with a passing grade of C or better.

Primary Grade: 10

Grade Range: 10, 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

Earth Science

In Earth Science, students discover the theories about how Earth first formed. They explore Earth’s history and the different geologic processes that continually take effect and help to shape the planet. Students debate the ways in which human impacts affect the Earth's climate, and they view Earth as a body within the solar system and universe. They also review Earth's renewable and finite resources. The course concludes with a virtual tour of Earth's atmosphere and oceans.

Primary Grade: 10

Grade Range: 9, 10, 11
Full-Year, Semester Based: 1 credit
NCAA Eligible

Environmental Science

Environmental Science introduces students to the scientific method, terrestrial and aquatic ecosystems, biomes of the world, trophic interactions, and nutrient and chemical cycles. Students analyze the human impact on the environment and ways to reduce negative consequences. Students also investigate environmental issues first hand and use their discoveries to make environmental decisions for themselves.

Primary Grade: 10

Grade Range: 9, 10
Half-Year, Semester Based: 0.5 credit
NCAA Eligible

Forensic Science

Students enrolled in Forensic Science will develop a better understanding of the reality of forensic science, which is often contradicted by the fictional forensic science portrayed in entertainment. Students begin by exploring the history and background of forensic science. They discover several forensic science disciplines, such as pathology, anthropology, toxicology, serology, entomology, and odontology. Students learn and use proper lab practices in order to ensure the integrity of any collected organic and inorganic evidence. Students investigate chromatography, spectroscopy, and microscopy techniques. They also explore and survey the impact that DNA analysis and questioned document analysis have on forensic science. This course teaches the proper handling of impression evidence, such as prints from shoes, feet, tires, lips, and fingers, as well as firearm impressions. Students also examine the analysis of trace evidence, including hair and glass. The course concludes with an exploration into the ways in which forensic science is interconnected with the legal system, as well as what the future holds for forensic science. Students will participate in numerous hands-on labs, including measuring a hypothetical time of death, extracting their own DNA, and analyzing their own fingerprint impressions. Forensic Science is ideal for high school students who are interested in forensic science, biology, law, and/or criminalistics. Completion of one full year of high school Biology is required in order to evaluate the numerous biological concepts present in this course. In addition, students must be mature, independent learners and must be comfortable with learning new technology.

Please note that the concepts discussed in any forensic science course are intended for mature and responsible students only. Delicate and sensitive concepts related to forensic science will be discussed in a respectful and straightforward manner.

Primary Grade: 11
Grade Range: 10, 11, 12
Half-Year, Semester Based: 0.5 credit
NCAA Eligible

Fundamentals of Ecology

Fundamentals of Ecology allows students to explore the ways in which organisms interact with their surrounding environments. Students will investigate ecological principles, such as natural selection, population and population dynamics, biodiversity, and the sustainability of ecosystems. Students also analyze major ecological challenges and the different ways society is working to mitigate these challenges.

Primary Grade: 10

Grade Range: 9, 10, 11
Half-Year, Semester Based: 0.5 credit
NCAA Eligible

Introduction to Engineering

Introduction to Engineering provides students with an overview of the field of engineering and the primary processes and procedures used by engineers. Students explore engineering careers and their impacts on society, and they learn how mathematics and science are used in the field of engineering. They examine different engineering disciplines, the engineering design process, and various engineering styles and methods used in the field. Students take part in hands-on learning as they work through a real-life design problem and solve it through the steps of the engineering design process. The course concludes with a student-created presentation to demonstrate their solution to the design problem. Introduction to Engineering is an excellent addition to a STEM-centered curriculum.

Primary Grade: 10

Grade Range: 9, 10, 11
Half-Year, Semester Based: 0.5 credit

Physical Science

Physical Science students are introduced to the principles of chemistry and physics so that they may develop a better understanding of atoms, chemical reactions, and nuclear interactions. Students explore the properties and states of matter and investigate chemical bonds and reactions. Students will investigate the development of the periodic table, an outline of modern atomic theory, and organic and nuclear chemistry. Additionally, students study Newton's laws of motion while considering the interactions between motion, forces, energy, and thermodynamics. As a prerequisite to Physical Science, students must have completed Algebra I.

Primary Grade: 9

Grade Range: 9, 10, 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

Physics

Students enrolled in Physics advance their knowledge and understanding of concepts in previous general science courses. In this course, students examine classical mechanics while learning to calculate concepts in one-dimensional, two-dimensional, and circular motion. Students explore work and energy in addition to the concepts of waves, sound, light, optics, and electromagnetism. The course concludes with an analysis of nuclear physics and a debate on quantum physics. This course requires students to use fundamental algebra and analytical skills to solve problems and analyze situations. As a prerequisite to Physics, students must have completed Algebra I. While the completion of Trigonometry is not required, a pre- or corequisite of Trigonometry will allow students to be better prepared for calculations involving dynamics, vectors, and kinematics.

Primary Grade: 11

Grade Range: 10, 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

Sports Medicine

Sports Medicine provides students with a basic knowledge of the history of sports medicine, the anatomy of the human body, and common injuries that occur in sports. In addition, the course discusses techniques used in sports medicine to train and strengthen the body, treatments for injury and disease, and proper nutrition for athletes. Completion of one full year of high school Biology is required in order to evaluate the numerous biological concepts present in this course.

Primary Grade: 12

Grade Range: 10, 11, 12
Half-Year, Semester Based: 0.5 credit

Biology - Honors

In Biology Honors, students are challenged to master more in-depth content, tied to appropriate academic standards, in the same period as a traditional course, with a high level of rigor in both requirements and assessments. Biology follows the adventures of two Lincoln High School students, Zeke and Chloe, as they explore the fascinating world of the biological sciences. As members of the BioLINC Club, organized by their teacher Mr. Quinn, they attend field trips and conduct laboratory activities to learn more about topics in Biology. Students begin by exploring the foundations of biology, the chemistry of life, and the structure and function of cells. Then, they dive into the basics of cellular energy, including photosynthesis and cellular respiration. Next, cellular development and reproduction are explored, including mitosis and meiosis. The principles of heredity and the manipulation and testing of DNA are also examined. Semester one concludes with a look at the history of life, including the fossil record and geologic time scale. During semester two, students investigate the principles of evolution and how populations change over time.

Students continue by studying the basics of ecology and how organisms are intertwined within communities. The ecosystems within the biosphere are explored, as well as the impacts humans have on Earth's environment. Next, the classification system used to categorize organisms on Earth is explored, and the behaviors of animals are studied. Finally, the course culminates with a look at how organisms maintain homeostasis and how human body systems work.

Primary Grade: 9

Grade Range: 9, 10
Full-Year, Semester Based: 1 credit
NCAA Eligible

Chemistry - Honors

In Chemistry Honors, students are challenged to master more in-depth content, tied to appropriate academic standards, in the same period as a traditional course, with a high level of rigor in both requirements and assessments. Chemistry takes students on a journey with Elena Gilbert, a crime scene investigation intern, who applies the fundamentals of chemistry to CheMYSTERY crime scene investigations at the conclusion of each topic. The journey begins with an exploration of scientific practices, laboratory safety guidelines, and measurement skills. Next, students work through the properties of matter, atomic theory and structure, and quantum mechanics. The history and organization of the periodic table precedes exploring the basics of chemical bonding, rules for naming compounds, proper construction of chemical formulas, and methods of chemical quantification. Semester one concludes by investigating the types of chemical reactions and balancing chemical equations. During semester two, students begin with conducting stoichiometric calculations, studying the behavior of gases, and investigating the nature of solutions. Next, the world of thermochemistry is explored, as well as the concept of equilibrium. Students continue into an investigation of acids, bases, and salts and the concept of oxidation-reduction reactions. The course culminates with a look at specialty areas of chemistry, including nuclear chemistry, organic chemistry, biochemistry, and electrochemistry. As a prerequisite to Chemistry, students must have completed Algebra I with a passing grade of C or better.

Primary Grade: 10

Grade Range: 10, 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

Physics - Honors

In Physics Honors, students are challenged to master more in-depth content, tied to appropriate academic standards, in the same period as a traditional course, with a high level of rigor in both requirements and assessments. Students enrolled in Physics advance their knowledge and understanding of concepts in previous general science courses. In this course, students examine classical mechanics while learning to calculate concepts in one-dimensional, two-dimensional, and circular motion. Students explore work and energy in addition to the concepts of waves, sound, light, optics, and electromagnetism. The course concludes with an analysis of nuclear physics and a debate on quantum physics. This course requires students to use fundamental algebra and analytical skills to solve problems and analyze situations. As a prerequisite to Physics, students must have completed Algebra I and must possess basic spreadsheet, word processing, and presentation software knowledge. While the completion of Trigonometry is not required, a pre-or corequisite of Trigonometry will allow students to be better prepared for calculations involving dynamics, vectors, and kinematics.

Primary Grade: 11

Grade Range: 10, 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

Earth Science - Honors

In Earth Science Honors, students are challenged to master more in-depth content, tied to appropriate academic standards, in the same period as a traditional course, with a high level of rigor in both requirements and assessments. In Earth Science, students discover the theories about how Earth first formed. They explore Earth’s history and the different geologic processes that continually take effect and help to shape the planet. Students debate the ways in which human impacts affect the Earth's climate, and they view Earth as a body within the solar system and universe. They also review Earth's renewable and finite resources. The course concludes with a virtual tour of Earth's atmosphere and oceans.

Primary Grade: 10

Grade Range: 9, 10, 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

Anatomy and Physiology - Honors

In Anatomy and Physiology Honors, students are challenged to master more in-depth content, tied to appropriate academic standards, in the same period as a traditional course, with a high level of rigor in both requirements and assessments. The Anatomy and Physiology course allows students to discover the fascinating dynamics of the human body. Students begin by exploring the history of anatomy, essential anatomical terminology, and the hierarchical organization of the human body. Next, students are introduced to basic biochemistry and cellular processes, which includes a virtual tour of the cell. Students also investigate the structure, function, hierarchy, and diseases associated with each organ system. Completion of one full year of high school Biology is required in order to understand the numerous biological concepts presented in this course.

Primary Grade: 12

Grade Range: 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible

Physical Science - Honors

In Physical Science Honors, students are challenged to master more in-depth content, tied to appropriate academic standards, in the same period as a traditional course, with a high level of rigor in both requirements and assessments. Physical Science students are introduced to the principles of chemistry and physics so that they may develop a better understanding of atoms, chemical reactions, and nuclear interactions. Students explore the properties and states of matter and investigate chemical bonds and reactions. Students will investigate the development of the periodic table, an outline of modern atomic theory, and organic and nuclear chemistry. Additionally, students study Newton’s laws of motion while considering the interactions between motion, forces, energy, and thermodynamics. As a prerequisite to Physical Science, students must have completed Algebra I and must possess basic spreadsheet, word processing, and presentation software knowledge.

Primary Grade: 9

Grade Range: 9, 10, 11, 12
Full-Year, Semester Based: 1 credit
NCAA Eligible