

ENGLISH

Course Title: ENGLISH LANGUAGE ARTS 9

Course Description: This freshman-year English course engages students in literary analysis and inferential evaluation of great texts both classic and contemporary. While critically reading fiction, poetry, drama, and literary nonfiction, students will master comprehension and literary-analysis strategies. Interwoven in the lessons across two semesters are activities that encourage students to strengthen their oral language skills and produce clear, coherent writing. Students will read a range of classic texts including Homer's *The Odyssey*, Shakespeare's *Romeo and Juliet*, and Richard Connell's "The Most Dangerous Game." They will also study short but complex texts, including influential speeches by Dr. Martin Luther King Jr., Franklin D. Roosevelt, and Ronald Reagan. Contemporary texts by Richard Preston, Julia Alvarez, and Maya Angelou round out the course.

Course Title: ENGLISH LANGUAGE ARTS 10

Course Description: Focused on application, this sophomore English course reinforces literary analysis and twenty-first century skills with superb pieces of literature and literary nonfiction, application e-resources, and educational interactives. Each thematic unit focuses on specific literary analysis skills and allows students to apply them to a range of genres and text structures. As these units meld modeling and application, they also expand on training in media literacy, twenty-first-century career skills, and the essentials of grammar and vocabulary. Under the guidance of the eWriting software, students also compose descriptive, persuasive, expository, literary analysis, research, narrative, and compare-contrast essays.

Course Title: ENGLISH LANGUAGE ARTS 11

Course Description: This junior-year English course invites students to delve into American literature from early American Indian voices through contemporary works. Students engage in literary analysis and inferential evaluation of great texts as the centerpieces of this course. While critically reading fiction, poetry, drama, and expository nonfiction, students master comprehension and literary analysis strategies. Interwoven in the lessons across two semesters are tasks that encourage students to strengthen their oral language skills and produce creative, coherent writing. Students read a range of short but complex texts, including works by Ralph Waldo Emerson, Emily Dickinson, Herman Melville, Nathaniel Hawthorne, Paul Laurence Dunbar, Martin Luther King, Jr., F. Scott Fitzgerald, Sandra Cisneros, Amy Tan, and Dave Eggers.

Course Title: ENGLISH LANGUAGE ARTS 12

Course Description: This senior-level English course offers fascinating insight into British literary traditions spanning from Anglo-Saxon writing to the modern period. With interactive introductions and historical contexts, this full-year course connects philosophical, political, religious, ethical, and social influences of each time period to the works of many notable authors, including Chaucer, William Shakespeare, Queen Elizabeth I, Elizabeth Barrett Browning, and Virginia Woolf. Adding an extra dimension to the British literary experience, this course also exposes students to world literature, including works from India, Europe, China, and Spain.

MATH

Course Title: CA Math I

Course Description: This course formalizes and extends middle-school mathematics, deepening their understanding of linear relationships. The course begins with a review of relationships between quantities, building from unit conversion to a study of expressions, equations, and inequalities. Students contrast linear and exponential relationships, including a study of sequences, as well as applications such as growth and decay. Students review one-, two-, and multi-step equations, formally reasoning about each step using properties of equality. Students extend this reasoning to systems of linear equations. Students use descriptive statistics to analyze data before turning their attention to transformations and the relationship between Algebra and Geometry on the coordinate plane.

Course Title: CA Math II

Course Description: This course begins with a brief exploration of radicals and polynomials before delving into quadratic expressions, equations, and functions, including a derivation of the quadratic formula. Students then embark on a deep study of the applications of probability and develop advanced reasoning skills with a study of similarity, congruence, and proofs of mathematical theorems. Students explore right triangles with an introduction to right triangle trigonometry before turning their attention into the geometry of circles and making informal arguments to derive formulas for the volumes of various solids.

Course Title: CA Math III

Course Description: This course synthesizes previous mathematical learning in four focused areas of instruction. First, students relate visual displays and summary statistics to various types of data and to probability distributions with a focus on drawing conclusions from the data. Then, students embark on an in-depth study of polynomial, rational, and radical functions, drawing on concepts of integers and number properties to understand polynomial operations and the combination of functions through operations. This section of instruction builds to the Fundamental Theorem of Algebra. Students then expand the study of right-triangle trigonometry they began in Mathematics II to include non-right triangles, developing the Laws of Sines and Cosines. Finally, students model an array of real-world situations with all the types of functions they have studied, including work with logarithms to solve exponential equations. As they synthesize and generalize what they have learned about a variety of function families, students appreciate the usefulness and relevance of mathematics in the real world.

Course Title: Financial Math

Course Description: Connecting practical mathematical concepts to personal and business settings, this course offers informative and

highly useful lessons that challenge students to gain a deeper understanding of financial math. Relevant, projectbased learning activities cover stimulating topics such as personal financial planning, budgeting and wise spending, banking, paying taxes, the importance of insurance, longterm investing, buying a house, consumer loans, economic principles, traveling abroad, starting a business, and analyzing business data. Offered as a two-semester course for high school students, this course encourages mastery of math skill sets, including percentages, proportions, data analysis, linear systems, and exponential functions.

SCIENCE

Course Title: **The Living Earth**

Course Description: This year-long high school course engages students in the study of life and living organisms, and examines biology and biochemistry in the real world. The course encompasses traditional concepts in biology and encourages exploration of new discoveries in the field. The components include biochemistry, cell biology, cell processes, heredity and reproduction, the evolution of life, taxonomy, human body systems, and ecology.

This course is aligned with the Next Generation Science Standards, which were developed by states to improve science education for all students. The goals of these standards are to develop a thorough understanding of content as well as improve key skills like communication, collaboration, inquiry, problem-solving, and creative thinking.

Course Title: **Chemistry**

Course Description: This rigorous full-year course engages students in the study of the composition, properties, changes, and interactions of matter. The course covers the basic concepts of chemistry and includes virtual laboratory experiments that encourage higher-order thinking applications.

There is also a wet lab component for each of these labs. The components of this course include the composition and properties of matter, changes and interactions of matter, organic chemistry, and nuclear chemistry. Throughout the course, students solve problems, reason abstractly, and learn to think critically.

SOCIAL SCIENCE

Course Title: **CA- World History, Culture, and Geography**

Course Description: This year-long course examines the major events and turning points of world history from ancient times to the present. Students investigate the development of classical civilizations in the Middle East, Africa, Europe, and Asia, and they explore the economic, political, and social revolutions that have transformed human history. At the end of the course, students conduct a rigorous study of modern history, allowing them to draw connections between past events and contemporary issues. The use of recurring themes, such as social history, democratic government, and the relationship between history and the arts, allows students to draw connections between the

past and the present, among cultures, and among multiple perspectives. Throughout the course, students use a variety of primary and secondary sources, including legal documents, essays, historical writings, and political cartoons to evaluate the reliability of historical evidence and to draw conclusions about historical events.

Course Title: CA-US History and Geography

Course Description: This course presents a cohesive and comprehensive overview of the major events and turning points of U.S. history from the establishment of government through the modern age. The course leads students toward a clearer understanding of the patterns, processes, and people that have shaped U.S. history. As students progress through each era of modern U.S. history, they will study the impact of dynamic leadership and economic and political change on the United States' rise to global prominence, the influence of social and political movements on societal change, and the importance of modern cultural and political developments. Recurring themes lead students to draw connections between the past and the present, between cultures, and between multiple Perspectives. Rigorous reading and writing activities incorporate Common Core literacy standards to help students develop critical thinking and communication skills that will prepare them for the future.

Course Title: CA-Economics

Course Description: This semester-long course invites students to broaden their understanding of how economic concepts apply to their everyday lives—including microeconomic and macroeconomic theory and the characteristics of mixed-market economies, the role of government in a free enterprise system and the global economy, and personal finance strategies. Throughout the course, students apply critical thinking skills while making practical economic choices. Students also master literacy skills through rigorous reading and writing activities. Students analyze data displays and write routinely and responsively in tasks and assignments that are based on scenarios, texts, activities, and examples. In more extensive, process-based writing lessons, students write full-length essays in informative and argumentative formats.

Course Title: CA-Principles of American Democracy (American Government)

Course Description: Providing students with the opportunity to learn about the historical events, philosophers, and topical issues that helped create the democratic foundations of this nation, Principles of American Democracy is an engaging one-semester course that will introduce high school students to the Founding Fathers and expose them to the ideas that shaped the nation. Students will identify important political leaders and trace the development and organization of federal, state, and local government. In addition, students will explain the political process and analyze the United States' role as a global, political, and economic participant. The course specifically targets the philosophies and foundations of the United States government, the organization of the branches of government, government on a state and local level, and civil liberties and laws. Full of timely and interesting content, this course will inspire students to be more informed citizens and equip them to Understand how the United States compares economically and politically on a global scale. Throughout the course, students examine primary and secondary sources, including political cartoons, essays, and judicial opinions.

Students also sharpen their writing skills in shorter tasks and assignments, and practice outlining and drafting skills by writing full informative, and argumentative essays.