



Course Catalog

2017-18

English Language Arts

ENGLISH LANGUAGE ARTS 7 (MS)

Students grow as readers, writers, and thinkers in this middle school course. With engaging literary and informational texts, students learn to think critically, analyze an author's language, and cite evidence to support ideas. Students complete an in-depth study of Jack London's classic novel *White Fang* and read excerpts from other stories, poetry, and nonfiction. Explicit modeling and ample opportunities for practice help students sharpen their vocabulary, grammar, and listening skills. Students also respond routinely to texts they have read. In extensive, process-based writing lessons, students write topical essays in narrative, informative, analytical, and argumentative formats. In this full year course, students develop a mastery of reading, writing, and language arts skills.

ENGLISH LANGUAGE ARTS 8 (MS)

In this course, students build on their knowledge and blossom as thoughtful readers and clear, effective writers. A balance of literary and informational texts engage students throughout the course in reading critically, analyzing texts, and citing evidence to support claims. Students sharpen their vocabulary, grammar, and listening skills through lessons designed to provide explicit modeling and ample opportunities to practice. Students also routinely write responses to texts they have read, and use more extensive, process-based lessons to produce full-length essays in narrative, informative, analytical, and argumentative formats. In this full year course, students develop a mastery of reading, writing, and language arts skills.

ENGLISH LANGUAGE ARTS 9

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. and Franklin D. Roosevelt. Contemporary texts by Richard Preston, Melba Pattillo Beals and Maya Angelou round out the course.

ENGLISH LANGUAGE ARTS 10

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.

ENGLISH LANGUAGE ARTS 11

This junior-year English course invites students to delve into American literature from early Native American 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, Paul Laurence Dunbar, Martin Luther King, Jr., F. Scott Fitzgerald, Sandra Cisneros, Amy Tan, and Dave Eggers.

ENGLISH LANGUAGE ARTS 12

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.

ENGLISH LANGUAGE ARTS 12 - EXPOSITORY READING AND WRITING

This elective English course is designed to develop critical reading and writing skills while preparing high school students to meet the demands of college-level work. While students will explore some critical reading skills in fiction, poetry, and drama the focus of this course will be on expository and persuasive texts and the analytical reading skills that are necessary for college success. Students will read a range of short but complex texts, including works by Walt Whitman, Abraham Lincoln, Cesar Chavez, Martin Luther King Jr., Langston Hughes, Julia Alvarez, Edna St. Vincent Millay, and Gary Soto.

Mathematics

MATHEMATICS 7 (MS)

This course begins with an in-depth study of proportional reasoning during which students utilize concrete models such as bar diagrams and tables to increase and develop conceptual understanding of rates, ratios, proportions, and percentages. Students' number fluency and understanding of the rational number system are extended as they perform operations with signed rational numbers embedded in real-world contexts. In statistics, students develop meanings for representative samples, measures of central tendency, variation, and the ideal representation for comparisons of given data sets. Students develop an understanding of both theoretical and experimental probability. Throughout the course, students build fluency in writing expressions and equations that model real-world scenarios. They apply their understanding of inverse operations to solve multi-step equations and inequalities. Students build on their proportional reasoning to solve problems about scale drawings by relating the corresponding lengths between objects. The course concludes with a geometric analysis of angle relationships, area, and volume of both two- and three-dimensional figures.

MATHEMATICS 8 (MS)

The course begins with a unit on input-output relationships that builds a foundation for learning about functions. Students make connections between verbal, numeric, algebraic, and graphical representations of relations and apply this knowledge to create linear functions that can be used to model and solve mathematical and real-world problems. Technology is used to build deeper connections among representations. Students focus on formulating expressions and equations, including modeling an association in bivariate data with a linear equation, and writing and solving linear equations and systems of linear equations. Students develop a deeper understanding of how translations, rotations, reflections, and dilations of distances and angles affect congruency and similarity. Students develop rules of exponents and use them to simplify exponential expressions. Students extend rules of exponents as they perform operations with numbers in scientific notation. Estimating and comparing square roots of non-perfect squares to perfect squares exposes students to irrational numbers and lays the foundation for applications such as the Pythagorean theorem, distance, and volume.

PRE-ALGEBRA

This full-year course is designed for students who have completed a middle school mathematics sequence but are not yet algebra ready. This course reviews key algebra readiness skills from the middle grades and introduces basic Integrated Math 1 work with appropriate support. Students revisit concepts in numbers and operations, expressions and equations, ratios and proportions, and basic functions. By the end of the course, students are ready to begin a more formal high school algebra study.

GEOMETRY

This course formalizes what students learned about geometry in the middle grades with a focus on reasoning and making mathematical arguments. Mathematical reasoning is introduced with a study of triangle congruency, including exposure to formal proofs and geometric constructions. Then students extend what they have learned to other essential triangle concepts, including similarity, right-triangle trigonometry, and the laws of sines and cosines. Moving on to other shapes, students justify and derive various formulas for circumference, area, and volume, as well as cross-sections of solids and rotations of two-dimensional objects. Students then make important connections between geometry and algebra, including special triangles, slopes of parallel and perpendicular lines, and parabolas in the coordinate plane, before delving into an in-depth investigation of the geometry of circles. The course closes with a study of set theory and probability, as students apply theoretical and experimental probability to make decisions informed by data analysis.

ALGEBRA II

This course focuses on functions, polynomials, periodic phenomena, and collecting and analyzing data. The course begins with a review of linear and quadratic functions to solidify a foundation for learning these new functions. Students make connections between verbal, numeric, algebraic, and graphical representations of functions and apply this knowledge as they create equations and inequalities that can be used to model and solve mathematical and real-world problems. As students refine and expand their algebraic skills, they will draw analogies among the operations and field properties of real numbers and those of complex numbers and algebraic expressions. Mathematical practices and habits of mind are embedded throughout the course, as students solve novel problems, reason abstractly, and think critically.

MATHEMATICS I

The first in an integrated math series for high school, this course formalizes and extends middle school mathematics, deepening students' 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.

MATHEMATICS II

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.

MATHEMATICS III

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 and 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.

PERSONAL FINANCE

Connecting practical mathematical concepts to personal settings, this course offers informative and highly useful lessons that challenge students to gain a deeper understanding of financial math. Relevant, project-based learning activities cover stimulating topics such as personal financial planning, budgeting and wise spending, banking, paying taxes, the importance of insurance, long-term investing, buying a house, consumer loans, and traveling abroad. 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

LIFE SCIENCE (MS)

Examining a broad spectrum of the biological sciences, Life Science is a full-year course for middle school students that builds on basic principles of scientific inquiry and translates those skills to more complex, overarching biological themes. The course includes units that help students understand the definitions, forms, and classifications of living organisms and learn to analyze the diversity of each unique group of living organisms. Other units introduce students to the structures and functions of cells, cell theory, and cell reproduction. These larger themes are then applied to other topics, such as genetics, Darwinian theory, and human biology and health. An introduction of ecology draws all of these concepts together to examine the interrelationships that help to maintain life on Earth.

PHYSICAL SCIENCE (MS)

This full-year course focuses on basic concepts in chemistry and physics and encourages exploration of new discoveries in the field of physical science. The course includes an overview

of scientific principles and procedures and has students examine the chemical building blocks of our physical world and the composition of matter. Additionally, students explore the properties that affect motion, forces, and energy on Earth. Building on these concepts, the course covers the properties of electricity and magnetism and the effects of these phenomena. As students refine and expand their understanding of physical science, they will apply their knowledge to complete interactive virtual labs that require them to ask questions and create hypotheses. Hands-on wet lab options are also available.

EARTH SCIENCE

Students enrolled in this dynamic course explore the scope of Earth sciences, covering everything from basic structure and rock formation to the incredible and volatile forces that have shaped and changed our planet. As climate change and energy conservation become increasingly prevalent in the national discourse, it will be important for students to understand the concepts and causes of our changing Earth. Earth Science is a two-semester course that provides a solid foundation for understanding the physical characteristics that make the planet Earth unique and examines how these characteristics differ among the planets of our solar system.

BIOLOGY

This compelling two-semester course engages students in the study of life and living organisms and examines biology and biochemistry in the real world. This is a yearlong course that encompasses traditional concepts in biology and encourages exploration of new discoveries in this field of science. The components include biochemistry, cell biology, cell processes, heredity and reproduction, the evolution of life, taxonomy, human body systems, and ecology.

CHEMISTRY

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 eighteen virtual laboratory experiments that encourage higher-order thinking applications. The components of this course include chemistry and its methods, the composition and properties of matter, changes and interactions of matter, factors affecting the interactions of matter, electrochemistry, organic chemistry, biochemistry, nuclear chemistry, mathematical applications, and applications of chemistry in the real world.

Social Studies

U.S. HISTORY (MS)

Offering an interactive and comprehensive overview of American history, this course engages and inspires students to learn about the rich and diverse history of America's native peoples, early European colonization and settlement in America, and the creation of a new nation through the American Revolution. Middle school students enrolled in this course will closely examine major changes brought about by the nation's reconstruction, industrialization, urbanization, and progressive reforms and consider the implications each of these events had on the expansion of

the United States' global influence through modern times. Over the course of two semesters, interesting course content encourages students to think carefully about the challenges and opportunities facing the United States in the twenty-first century.

WORLD HISTORY (MS)

Providing students with an opportunity to learn the diverse history that has shaped our world, this course delves into the evolution of civilization from the rise of ancient empires through the twenty-first century. Middle school students enrolled in this exciting and informative course investigate the development of medieval societies, the effects of the Renaissance and the Reformation, and the progress made during various periods of revolution, industrialization, urbanization, and reform. Over the course of two semesters, students analyze effects of political conflicts and social issues on the continuing development and interdependence among nations in the modern world.

CIVICS, GOVERNMENT & ECONOMICS (MS)

Exploring the structure of the United States government on a national, state, and local level, this course challenges students to learn and understand fundamental concepts and philosophies that led to the creation of the United States Constitution. Students enrolled in this two-semester course analyze the political process, political parties, and influences that affect them both. Engaging, interactive content introduces economic concepts and encourages students to explore government and economics on a global scale. By instilling a thorough understanding of government and economics, this course inspires students to investigate what it means to be an American citizen.

WORLD CULTURES & GEOGRAPHY (MS)

Designed to introduce students to the study of geography, this course helps students master important concepts in physical and human geography. Comprehensive and organized by region, this two-semester middle school course helps students understand the Earth's physical and human diversity. Students analyze population and settlement patterns and evaluate the ways that human activities modify the physical environment. While studying humans around the world, students compare development, standards of living, systems of government, and economic factors across the globe. In addition, students gain a rich understanding of global cultures and the historical factors that have shaped the world around them. All units in the course are parallel and include studies in physical and human geography, ancient cultures, regional studies, and modern issues.

WORLD HISTORY

This year-long course examines the major events and turning points of world history from the Enlightenment to the present. Students investigate the foundational ideas that shaped the modern world in the Middle East, Africa, Europe, Asia, and the Americas, and then explore the economic, political, and social revolutions that have transformed human history. This rigorous study of modern history examines recurring themes, such as social history, democratic

government, and the relationship between history and the arts, allowing students to draw connections between the past and the present, across cultures, and among multiple perspectives. 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. Students also sharpen their writing skills in shorter tasks and assignments, and practice outlining and drafting skills by writing full informative and argumentative essays.

U.S. HISTORY

U.S. History is a yearlong course that dynamically explores the people, places, and events that shaped United States history. This course stretches from the Era of Exploration through the modern age, leading students through a careful examination of the defining moments that shaped the nation of today. As they study the early history of the United States, students will learn critical-thinking skills by examining the constitutional foundations of U.S. government. Recurring themes such as territorial expansion, the rise of industrialization, and the significance of slavery will be examined in the context of how these issues contributed to the Civil War and Reconstruction. Students will also examine 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 among multiple perspectives.

ECONOMICS

This 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.

GOVERNMENT

This semester-long course provides students with a practical understanding of the principles and procedures of government. The course begins by establishing the origins and founding principles of American government. After a rigorous review of the Constitution and its amendments, students investigate the development and extension of civil rights and liberties. Lessons also introduce influential Supreme Court decisions to demonstrate the impact and importance of constitutional rights. The course builds on this foundation by guiding students through the function of government today and the role of citizens in the civic process and culminates in an examination of public policy and the roles of citizens and organizations in promoting policy changes. 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.

VAPA

ART

Covering art appreciation and the beginning of art history, this course encourages students to gain an understanding and appreciation of art in their everyday lives. Presented in an engaging format, this two-semester course provides an overview of many introductory themes: the definition of art, the cultural purpose of art, visual elements of art, terminology and principles of design, and two- and three-dimensional media and techniques. Tracing the history of art, high school students enrolled in the course also explore the following time periods and places: prehistoric art, art in ancient civilizations, and world art before 1400.

GENERAL ELECTIVES

PHYSICAL EDUCATION

Lifetime Fitness, which is a four-semester physical education course, takes students through a variety of physical education topics including nutrition, exercise, sports, and more. In this course, students will complete weekly fitness Logs to track their required fitness activities.

HEALTH

Health is a two-semester course that covers concepts like wellness, goal setting, first aid, illness, sexual health, and more. This course will give students the skills necessary to analyze themselves and their environment in order to make healthy life choices.

PSYCHOLOGY

This two-semester course introduces high school students to the study of psychology and helps them master fundamental concepts in research, theory, and human behavior. From a psychological point of view, students investigate the nature of being human as they build a comprehensive understanding of traditional psychological concept and contemporary perspectives in the field. Course components include an introduction to the history, perspectives, and research of psychology; an understanding of topics such as the biological aspects of psychology, learning, and cognitive development; the stages of human development; aspects of personality and intelligence; the classification and treatment of psychological disorders; and psychological aspects of social interactions.

GEOGRAPHY

Examining current global issues that impact our world today, this course takes a thematic approach to understanding the development of human systems, human understanding of the world, and human social organization. Divided into two semesters, this high school course will challenge students to develop geographic skills, including learning to interpret maps, analyze

data, and compare theories. Offering interactive content that will grow students' understanding of the development of modern civilization and human systems—from the agricultural revolution to the technological revolution—this course encourages students to analyze economic trends as well as compare global markets and urban environments.

INDEPENDENT LIVING

This course teaches students what it takes to understand the world of personal finance and make informed decisions about managing life decisions. Students learn more about economics and become more confident in setting and researching financial goals as they develop the core skills needed to be successful. In this two-semester course, students learn how to open bank accounts, invest money, apply for loans, apply for insurance, explore careers, manage business finances, make decisions about major purchases, apply for employment and more. Students will be inspired by stories from finance professionals and individuals who have reached their financial goals.

DIGITAL CITIZENSHIP

This one-semester course provides students with a comprehensive introduction to online learning, including how to work independently, stay safe, and develop effective study habits in virtual learning environments. Featuring direct-instruction videos, interactive tasks, and authentic projects, the course provides in-depth instruction and practice in important study skills such as time management, effective note-taking, test preparation, and collaborating effectively online. By the end of the course, students will understand what it takes to be successful online learners and responsible digital citizens.

FOREIGN LANGUAGE

SPANISH I & II

Students begin their introduction to high school Spanish with fundamental building blocks in four key areas of foreign language study: listening comprehension, speaking, reading, and writing. Each unit consists of an ongoing adventure story, a new vocabulary theme and grammar concept, numerous interactive games reinforcing vocabulary and grammar, reading and listening comprehension activities, speaking and writing activities, and multimedia cultural presentations covering major Spanish-speaking areas in Europe and the Americas.

CTE

CAREER READINESS

Introducing high school students to the working world, this course provides the knowledge and insight necessary to compete in today's challenging job market. This relevant and timely course helps students investigate careers as they apply to personal interests and abilities, develop the skills and job search documents needed to enter the workforce, explore the rights of workers and

traits of effective employees, and address the importance of professionalism and responsibility as careers change and evolve.

INTRODUCTION TO ENTREPRENEURSHIP

This two-semester course teaches the key skills and concepts students need to know to plan and launch a business. Students learn about real-life teen entrepreneurs; characteristics of successful entrepreneurs; how to attract investors and manage expenses; sales stages, planning, and budgeting; how to generate business ideas and create a business plan; and how to promote and market a company. Topics include exploring factors of business success and failure, economic systems, competition, production, costs and pricing, accounting, bookkeeping and financial reporting, working with others, and successfully managing employees.

INTRODUCTION TO BUSINESS

In this two-semester course, students learn the principles of business using real-world examples—learning what it takes to plan and launch a product or service in today’s fast-paced business environment. This course covers an introduction to economics, costs and profit, and different business types. Students are introduced to techniques for managing money, personally and as a business, and taxes and credit; the basics of financing a business; how a business relates to society both locally and globally; how to identify a business opportunity; and techniques for planning, executing, and marketing a business to respond to that opportunity.