



Middle School Course Descriptions  
Academic Year 2019-2020

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Middle school electives are listed in the high school catalog.

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The following codes appear next to each course name and indicate the versions of courses which are available.

\* = one semester course

H = Honors Level Course (National Curriculum)

Ed = E-Dynamics Course

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## English Language Arts

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### English Language Arts 6

This course eases students' transition to middle school with engaging, age-appropriate literary and informational reading selections. Students learn to read critically, analyze texts, and cite evidence to support ideas as they read essential parts of literary and informational texts and explore a full unit on Lewis Carroll's classic novel *Through the Looking Glass*. Vocabulary, grammar, and listening skills are sharpened through lessons that give students explicit modeling and ample practice. Students also engage in routine, responsive writing based on texts they have read. In extensive, process-based writing lessons, students write topical essays in narrative, informative, analytical, and argumentative forms. In this full-year course, students develop a mastery of reading, writing, and language arts skills.

### English Language Arts 7

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

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.

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## Social Studies

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### World History

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 the effects of political conflicts and social issues on the continuing development and interdependence among nations in the modern world.

### Civics, Government & Economics

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

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.

### U.S. History

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 21st century.

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## Science

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### Life Science

Examining a broad spectrum of the biological sciences, Life Science is a two-semester 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 definition, 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.

### 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.

### Physical Science

Encompassing the branch of science that studies nonliving systems, Physical Science is an exciting course that inspires students to explore key concepts and theories, each of which explains and/or models a particular aspect of the behavior of nature. Students enrolled in this two-semester course 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 these phenomena exhibit on the planet. A cumulative study of how each of these concepts elicits reactions across the solar system rounds out this dynamic course.

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## Mathematics

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### Mathematics 6

This course begins by connecting ratio and rate to multiplication and division, allowing students to use ratio reasoning to solve a wide variety of problems. Students further apply their understanding of multiplication and division to explain the standard procedure for dividing fractions. This course builds upon previous notions of the number system to now include the entire set of rational numbers. Students begin to understand the use of variables as they write, evaluate, and simplify expressions. They use the idea of equality and properties of operations to solve one-step equations and inequalities. In statistics, students explore different graphical ways to display data. They use data displays, measures of center, and measures of variability to summarize data sets. The Dual Credit course concludes with students reasoning about relationships among shapes to determine area, surface area, and volume.

### Mathematics 7

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

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 Algebra I work with appropriate support. Students revisit concepts in

number and operations, expressions and equations, ratio and proportion, and basic functions. By the end of the course, students are ready to begin a more formal high school Algebra I study.

## Algebra I

This course begins with a brief review of what students should already know about linear equations, with a focus on analyzing and explaining the process of solving equations. Students develop a strong foundation in working with linear equations in all forms, extending solution techniques to simple equations with exponents. Students explore functions, including notation, domain and range, multiple representations, and modeling. Through the comparison of linear and exponential functions, students contrast the concepts of additive and multiplicative change. Students then apply what they have learned to linear models of data, analyzing scatterplots and using lines of best fit to apply regression techniques. The course closes with an exploration of rational exponents, quadratic and exponential expressions, and an introduction to nonlinear functions, with a heavy emphasis on quadratics.

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## World Languages

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### Spanish 1

Middle school students begin their introduction to 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.

### Spanish 2

Students in middle school continue their introduction to 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.

### French 1

Students in middle school begin their introduction to French 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 French-speaking areas in Europe and across the globe.

### French 2

Middle school students continue their introduction to French 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 French-speaking areas in Europe and across the globe.

### German 1

Middle school students begin their introduction to German 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 German-speaking areas in Europe.



## German 2

Students continue their introduction to middle school German with this second-year course by covering 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 German-speaking areas in Europe.

## Chinese 1

In this middle school course, students begin their introduction to Chinese 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 Chinese-speaking countries.

## Chinese 2

Middle school students continue their introduction to Chinese 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 Chinese-speaking countries.

## Latin 1

Students in middle school begin their introduction to Latin with fundamental building blocks in four key areas of foreign language study: listening comprehension, speaking, reading, and writing. Each unit consists of a new vocabulary theme and grammar concept, numerous interactive games reinforcing vocabulary and grammar, reading and listening comprehension activities, speaking and writing activities, and cultural presentations covering significant aspects of Roman culture or their modern-day manifestations, and assessments.

## Latin 2

Middle school students continue their introduction to Latin with fundamental building blocks in four key areas of foreign language study: listening comprehension, speaking, reading, and writing. Each unit consists of a new vocabulary theme and grammar concept, numerous interactive games reinforcing vocabulary and grammar, reading and listening comprehension activities, speaking and writing activities, and cultural presentations covering significant aspects of Roman culture or their modern-day manifestations, and assessments.