



BRENTWOOD MIDDLE SCHOOL

8th Grade Course Catalog (2023-2024)

Language Arts

Standard Eighth grade Standard Language Arts follows standards to develop greater analytical reading and thinking skills that consistently spiral student learning of grade-level skills. Students write informational, narrative, and argumentative essays, incorporating textual evidence from literary or informational passages. Grammar instruction requires students to embed grammar concepts into writing. Students study two or three novels per year, in addition to short stories and poetry. Additionally, students independently read a novel of their choosing each quarter.

Advanced *Prerequisites: 90th percentile or above on TCAP and Teacher Recommendation* Eighth grade Advanced Language Arts follows standards to develop greater analytical reading and thinking skills that consistently spiral student learning of grade-level skills. Students write informational, narrative, and argumentative essays, incorporating textual evidence from literary or informational passages. Grammar instruction requires students to embed grammar concepts into writing. Students study two or three novels per year, in addition to short stories and poetry. Additionally, students independently read a novel of their choosing each quarter. The advanced language arts class extends the instruction and concepts covered within the standard language arts classes. Class instruction focuses on students' analysis, evaluation, and synthesis skills. The class may require additional independent reading and moves at a different pace.

Social Studies Eighth grade students will study the European colonization of North America, along with the geographic features that influenced early settlements and colonies. This course will emphasize the development and maturation of the British colonies, and the political, cultural, and economic influences that led to the American Revolution. The major events and outcomes of the American Revolution will be analyzed, along with the individuals that played influential roles in the development of the new nation. Students will follow the development of the United States and its government, continuing through the early 19th century. The impact of the expansion of the United States will be analyzed, including implications on domestic and foreign policy. Policies that affected the American Indians will also be studied. The events leading up to the Civil War will be examined, along with the individuals and events that were significant during the war. The history, people, government, and geography of Tennessee will be emphasized to illustrate the role our state has played in American history. Reconstruction and the development of the American West will conclude this course. Appropriate primary sources and informational texts will be included to enhance understanding of the content.

Science Eighth grade science focuses on exploring the world and understanding how it works. Students will explore scientific inquiry and the interplay between science and technology in our world. A well-balanced exploration of earth, life and physical science subjects covered include biodiversity and response to the environment, the rock cycle, plate tectonics, force and motion, the electromagnetic and gravitational fields at work in our universe. This program will place an emphasis on writing skills, scientific reasoning, critical thinking, and hands-on learning.

Mathematics

8th Grade Math*

Pre-Algebra is the prerequisite course that provides a strong foundation for high school Algebra 1 through the use of problem-solving situations, physical models, and appropriate technology to extend algebraic

thinking and engage student reasoning. This course will focus on 8th grade state of Tennessee math standards which includes a study of the real number system as well as solving multi-step equations. Word problems are deeply embedded within the course, and students use algebraic concepts to solve them. In addition to solving equations, students will explore functions, writing equations, graphing linear equations (including systems of equations), geometry, and statistics. Students will be expected to persevere in problem solving, reason abstractly and quantitatively, construct viable arguments and critique the reasoning of others as outlined by the state standards in preparation for the 8th grade TNReady test.

**Scientific (non-graphing) calculators are required. We recommend the TI-30XS MultiView calculator, or any other calculator in the TI-30 family. A Texas Instruments brand calculator is not required but it is highly recommended to maximize use in the classroom. **

Honors Algebra 1**

Prerequisites: Successful completion of Course 3 with a yearly average of 85% or above; 85% on the Algebra 1 placement test; 7th grade teacher recommendation.

Algebra 1 is an honors level, high school math course that uses problem solving situations, physical models and appropriate technology to extend algebraic thinking and engage student reasoning. Word problems are deeply embedded within the course and students use algebraic concepts to solve them. Problem solving and making mathematical connections to real world problems are critical to a student's success in this course. Concepts emphasized in the course: solving linear equations and inequalities, writing and graphing linear equations, writing and graphing systems of equations and inequalities, writing and graphing nonlinear functions (including but not limited to: absolute value, piecewise, quadratic, and exponential functions), analyzing transformations of a parent function, analyzing data using one-variable and two-variable statistics, solving quadratic functions, and simplifying rational expressions. Students will be expected to persevere in problem solving, reason abstractly and quantitatively, construct viable arguments, and critique the reasoning of others as outlined by state standards. Students enrolled in Algebra I must take the Algebra I EOC TNReady test. Students earn one high school math credit by completing Algebra I Honors. This credit will be calculated into a student's high school GPA, and the credit will appear as a letter grade on their high school transcript.

***Graphing calculators are required. We recommend the TI-84 Plus CE calculator, or any other calculator in the TI-84 family. A Texas Instruments brand calculator is not required but it is highly recommended to maximize use in the classroom. **

Honors Geometry**

Prerequisites: Completion of 7th grade Honors Algebra 1, appropriate scores on TNReady assessments, and Algebra 1 final examination.

In Honors Geometry, students will investigate and justify geometric concepts and relationships using both inductive and deductive reasoning. Concepts emphasized: undefined terms, postulates, theorems, measurement, geometric patterns, coordinate geometry, two- and three-dimensional figures, transformational geometry, congruence, similarity, inductive and deductive reasoning, logic and proof. Students enrolled in Honors Geometry must take the Geometry EOC TNReady test. Students earn one high school math credit by completing Honors Geometry. This credit will be calculated into a student's high school GPA, and the credit will appear as a letter grade on their high school transcript.

***Graphing calculators are required. We recommend the TI-84 Plus CE calculator, or any other calculator in the TI-84 family. A Texas Instruments brand calculator is not required but it is highly recommended to maximize use in the classroom.*

*******Academic Classes Note*******

INDIVIDUAL TEACHER REQUESTS WILL NOT BE GRANTED.