

	Code	Course Description	Code	Advanced Course Description
GRADE 6				
Mathematics, Grade 6	100018	Students will understand ratio concepts and use ratio reasoning to solve problems; apply and extend previous understanding of multiplication and division to divide fractions by fractions; compute fluently with multi-digit numbers and find common factors and multiples; apply and extend previous understanding of numbers to the system of rational numbers; apply and extend previous understanding of arithmetic to algebraic expressions; reason about and solve one-variable equations and inequalities; represent and analyze quantitative relationships between dependent and independent variables; solve real-world and mathematical problems involving area, surface area, and volume; develop understanding of statistical variability; and summarize and describe distribution.	100020	Students will solve real-world problems, completing advanced work in computational fluency of integers in addition, subtraction, multiplication, and division; and numerical and algebraic expressions and equations. Students will understand connections of and analyze proportional relationships.
English Language Arts, Grade 6	100028	Reading both literature and informational texts, students will cite textual evidence to support their analysis of what the text says explicitly as well as inferences drawn from the texts; write arguments to support claims, explanatory texts to examine a topic and convey ideas, and narratives to develop real or imagined experiences. Particular attention is given to establishing a formal style, developing organizational structure, and using effective transition words. Students will use speaking and listening skills to engage in collaborative discussions, interpret presented information, and delineate claims and evidence, and they will acquire and utilize grade-appropriate academic and domain-specific vocabulary, as well as varied sentence structures. Research and technology skills for presentations will also be emphasized.	100030	Students will make real-world and cross-curricular connections through advanced, student-driven work with grade-level standards with a focus on evidence-based literacy, analysis, and discussion. Additional emphasis will be placed on advanced composition and structure/style instruction.
Science, Grade 6	100038	Students will discover their world, planet, and Earth's place in the universe. Content focuses on the disciplinary core ideas in the Earth and Space Science domain: Earth's Place in the Universe, Earth's Systems, and Earth and Human Activity. A concentration on meteorology, geological processes, and astronomy, and society's interaction with the planet will be integrated with the disciplinary core ideas of the Engineering, Technology, and Applications of Science (ETS) domain.	100040	Students will complete advanced work with grade-level standards; in scientific processes, knowledge, and application; scientific principles, observation, and experimentation in earth sciences.
Social Studies Grade 6	100048	Students will study the history of the United States from the Industrial Revolution to present, including the rise of the United States as an industrial nation, World War I, the Great Depression, World War II, and the Cold War Era. Emphasis is placed on economic, geographic, historic, and civic and governmental changes that have influenced every aspect of life during these events, including communication and technological advances, reorganization of national boundaries, and the movement of the United States into the role of world leader.	100050	Students will complete advanced work in grade-level standards for the social sciences such as history, economics, geography, government, and civics, including analysis of the rapid changes in the United States regarding technology, society, politics, culture, and economy since the Industrial Revolution.

GRADE 7				
English Language Arts, Grade 7	200001	Reading both literature and informational texts, students will cite textual evidence to support their analysis of what the text says explicitly as well as inferences drawn from the texts; write arguments to support claims, explanatory texts to examine a topic and convey ideas, and narratives to develop real or imagined experiences. Particular attention is given to establishing a formal style, developing organizational structure, and using effective transition words. Students will use speaking and listening skills to engage in collaborative discussions, interpret presented information, and delineate claims and evidence, and they will acquire and utilize grade-appropriate academic and domain-specific vocabulary, as well as varied sentence structures. Research and technology skills for presentations will also be emphasized.	200002	Students will complete advanced work with grade-level standards; compose various types of text using real-world context in a student-centered environment; and discuss various text types to display understanding and application of concepts. Formal and creative writing will move students toward mastery of fiction genres, vocabulary, and usage.
Mathematics, Grade 7	210001	Students will analyze proportional relationships and use them to solve real-world and mathematical problems; apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers; use properties of operations to generate equivalent expressions; solve real-life and mathematical problems using numerical and algebraic expressions and equations; draw, construct, and describe geometrical figures and describe the relationship between them; solve real-life and mathematical problems involving angle measure, area, surface area, and volume; use random sampling to draw inferences about a population; draw informal comparative inferences about two populations; and investigate chance processes and develop, use, and evaluate probability models.	210045	2020-2021 TRANSITION YEAR COURSE FOR MATHEMATICS; OPTIONAL. The Grade 7 Accelerated Mathematics course has been carefully aligned and designed for middle school students who show particular motivation and interest in mathematics. Grade 7 Accelerated Mathematics includes standards from Grade 7 Mathematics and incorporates standards from Grade 8 Mathematics and Algebra I with Probability. Students who complete this class are eligible to enroll in Grade 8 Accelerated Mathematics or Grade 8 Mathematics. Students who complete both Grade 7 Accelerated Mathematics and Grade 8 Accelerated Mathematics are considered to have met the requirements of and may opt to omit the Algebra I with Probability course in their high school mathematics progression to enroll in additional mathematics courses after completing the required Algebra II with Statistics course.
Life Science, Grade 7	220001	Students will explore disciplinary core ideas in the Life Science domain: From Molecules to Organisms: Structures and Processes; Ecosystems: Interactions, Energy, and Dynamics; Heredity: Inheritance and Variation of Traits; and Unity and Diversity. A Life Science concentration on the structure and function of cells and their connections to organs and organ systems; the interactions between living organisms and between biotic and abiotic factors; explanations of genetic variations, results of genetic mutations, and impacts of genetic technologies; and the patterns of change in populations of organisms over a long period of time and the relationship between natural selection and the reproduction and survival of a population with integration of science and engineering practices will be integrated with the Engineering, Technology, and Applications of Science (ETS) domain.	220002	Students will complete advanced work with grade-level standards, with additional emphasis on critical thinking and problem solving, scientific argumentation, and experimental design.
Geography (Grade 7, Semester Course)	230001	Students will study world geography using a thematic approach, while focusing on Earth as the subject matter that involves people, places, and environments and learning that geography seeks meaning in spatial patterns and processes that involve asking questions regarding where and why. Cultural geography will emphasize Eastern Hemisphere; places and regions; physical systems; human systems; and relationships between people and their environment. The study of Physical and Human geography of Eastern and Western hemispheres will incorporate the five themes of Geography.	230002	Students will complete advanced work in grade-level standards.

Civics (Grade 7, Semester Course)	230003	Students will explore content regarding democracy; liberty; law; personal economics; and local, state, and national civic responsibility. The course provides students with information about how society works, including the role students play in the community and in the world. Students will examine the following as part of this study: United States founding documents; representative democracy; law; finance; United States political system; civic participation and responsibility; citizenship; government comparisons; and economics.	230004	Students will complete advanced work in grade-level standards.
GRADE 8				
English Language Arts, Grade 8	200003	Reading both literature and informational texts, students will cite textual evidence to support their analysis of what the text says explicitly as well as inferences drawn from the texts; write arguments to support claims, explanatory texts to examine a topic and convey ideas, and narratives to develop real or imagined experiences. Particular attention is given to establishing a formal style, developing organizational structure, and using effective transition words. Students will use speaking and listening skills to engage in collaborative discussions, interpret presented information, and delineate claims and evidence, and they will acquire and utilize grade-appropriate academic and domain-specific vocabulary, as well as varied sentence structures. Research and technology skills for presentations will also be emphasized.	200004	Students will complete advanced work in grade-level standards.
Mathematics, Grade 8	210003	Students will know that there are numbers that are not rational and approximate them by rational numbers; work with radicals and integer exponents; understand the connections among proportional relationships, lines, and linear equations; analyze and solve linear equations and pairs of simultaneous linear equations; define, evaluate, and compare functions; use functions to model relationships between quantities; understand congruence and similarity using physical models, transparencies, or geometry software; understand and apply the Pythagorean Theorem; solve real-world and mathematical problems involving volume of cylinders, cones, and spheres; and investigate patterns of association in bivariate data.	210005	This course builds on foundational mathematics content learned by students in Grades K-8 by expanding mathematics understanding to provide students with a strong mathematics education. Content is designed to engage students in a variety of mathematical experiences that include the use of reasoning and problem-solving skills, which may be applied to life situations beyond the classroom setting. This course serves as the cornerstone for all high school mathematics courses; therefore, all subsequent mathematics courses require student mastery of the Algebra I content standards. Seventh grade Accelerated Math is a pre-requisite for 8th grade Accelerated Math. Algebra I pre-requisite for graduation is met by taking both 7th & 8th grade Accelerated Math courses. *Please note: 7th grade Math decision determines mathematics pathway through high school.
Physical Science, Grade 8	220003	Students will explore disciplinary ideas in the Physical Science domain: Matter and Its Interactions; Motion and Stability: Forces and Interactions; Energy; and Waves and Their Applications in Technologies for Information Transfer. A concentration on the composition and properties of matter; forces and predicting and developing explanations for changes in motion; the conservation of energy, energy transformations and applications of energy to everyday life; and types and properties of waves and the use of waves in communication devices will be integrated with the disciplinary core ideas of the Engineering, Technology, and Applications of Science (ETS) domain.	220004	Students will complete advanced work in grade-level standards, with an emphasis on inquiry and scientific argumentation through science and engineering practices and collaborative learning. Math is integrated within both concentrations.
World History to 1500 (Grade 8 Course)	230011	Students will examine world history from the time period of prehistoric man to the 1500s. Through the strands of economics, geography, history, and political science, course content focuses on the migrations of early peoples, the rise of civilizations, the establishment of governments and religions, the growth of economic systems, and ways in which these events shaped Europe, Asia, Africa, and the Americas. The chronological study includes Ancient World Civilizations: Pre-Agrarian, River Valley, Classical and Early Medieval Times to 1500.	230012	Students will complete advanced work with grade-level standards.
		NOTE: ALGEBRA I IS ONE OF THE COURSES REQUIRED FOR ALL STUDENTS. ALGEBRA I IN GRADE 8 INCLUDES ALL OF ALGEBRA I COURSE CONTENT STANDARDS AND GRADE 8 COURSE CONTENT STANDARDS IN INSTRUCTION. ALGEBRA I IN GRADE 7 INCLUDES ALL OF ALGEBRA I COURSE CONTENT STANDARDS, GRADE 8 COURSE CONTENT STANDARDS, AND GRADE 7 COURSE CONTENT STANDARDS IN INSTRUCTION.		