

Grade 8

Course Descriptions

Elements of Language

The 8 grade course focuses first on honing students' writing skills and later on in the school year clarifying grammar categories. A cause-and-effect essay, a book review, a research report, a persuasive essay, etc., are some of the forms students will elaborate on in the first 7 dedicated to writing chapters. The communication part focuses on explaining a complex process, analyzing a book, and using brochures. Continued detailed exploration in the realm of grammar introduces them to appositive phrases, pronoun and antecedent agreement, correcting misplaced and dangling modifiers, as well as reinforcing parts of speech, compound and complex sentence structure, prepositional and verbal phrases, independent and subordinate clauses, and proper punctuation.

Resource – *Elements of Language, Holt, 2009*

Literature

Literature in 8 grade develops students' knowledge and ability to analyze a literary text as to its plot, conflict, setting, and characters. However, in this course students start learning about mood, symbol, style, voice and tone. Traditional and non-traditional poetic forms are explored, themes are identified, and historical and cultural analysis is performed during this exciting course of study. The writing workshops focus on developing students' writing and expressive skills through personal narratives, critical reviews, comparison-contrast essays, cause-and-effect essay, persuasive essay, a short story, and a research paper.

Resource – *Literature, Holt McDougal, 2010*

Algebra 1

Algebra 1 is a traditional one-year course in modern Algebra and it is the first course in the college preparatory sequence. The core mathematics course teaches the fundamentals of algebraic concepts and skills through incremental development. Students learn to manipulate signed numbers and exponents, graph equations on the rectangular coordinate system, and factor quadric equations that have real roots.

During the first semester instruction covers algebraic properties, fractions, factoring, signed exponents, properties of equalities, solutions of single and multivariable equations, abstract fractions and slope – intercept formula. During the second semester, students learn to factor quadric equations, use the Pythagorean Theorem, derive and equation between two points, solve linear inequalities, factor binomials and trinomials,

divide and multiply polynomials, simplify radical expressions and manipulate scientific notations. During the course there are variable types of Word Problems including ratios, percentages, uniform motion, compound interest, probability and others.

The goal of this course is to teach the basic concepts and skills in Algebra, which are fundamental to future understanding in Math and Science .This course provides the necessary tools for success in Geometry and Algebra II.

Grades Summarize 8 exams, 90 homework assignments, monthly quizzes and classroom participation and demonstrations.

Resource: *Algebra 1, An Incremental Development, 3rd Edition by John H. Saxon*

World History

This class introduces students to the civilizations of Early India, India's empires, ancient China, the Chinese empire, Islamic civilization, early Africa civilizations, and Mesoamerican civilizations, early North and South America and their social, religious, intellectual, and artistic life.

It explores twenty four major themes: Indus Valley Civilization, India's Vedic Age, Hinduism, Buddhism, The Maurya Empire, The Gupta Empire, Settling Along the Huang River, China Under the Zhou Dynasty, Religions and Beliefs of Ancient China, Shi Huangdi Unites China, Expansion Under the Han Dynasty, Han Society and Achievements, Origins of Islam, Muslim Empires, Muslim Achievements, Africa – A Trading Empire, Muslim Empires of West Africa, East African Civilization, Society and Culture, The Maya, The Aztecs, The Incas, North American Cultures.

It develops 7 historical thinking skills within the 4 major categories of 1. Analyzing historical sources and evidence (analyzing evidence and interpretation), 2. Making historical connections (contextualization and synthesis), 3. Chronological reasoning (causation and periodization), and 4. Creating and supporting a historical argument (argumentation).

The course includes diverse primary sources including written documents and images as well as maps and quantitative data (charts, graphs, tables). Students are provided opportunities to explain different causes and effects of historical events or processes, and to evaluate their relative significance as well as opportunities to develop written arguments that have a thesis supported by relevant historical evidence. The course includes essays, discussions, and variety of interactive methods of teaching.

Resource - *My World History, Pearson Education, 2012*

Physical Science

This is an introductory course to high school science (Physics and Chemistry courses). It covers many facets of physical science ranging from simple physics (motion, forces, work, heat, energy) to a more complex one (electromagnetism, sound, light, atomic energy) and from basic chemistry (atoms, elements, compounds, states of matter) to a more complex one (periodic table, chemical bonding, chemical reactions). Each new topic is presented in relation to the knowledge already built by students in their everyday life. Special emphasis is then given to introduction and understanding of fundamental physical and chemical concepts. Linking concepts to practical examples is then a major step in understanding the workings of the surrounding world. The spirit of inquiry is promoted through class participation, discussion and hands-on activities. Additional labs and research projects (including a science fair project) are conducted by students in order to further develop their scientific research skills.

Resource – *Physical Science, Holt, 2010*

Introduction to Digital Technology

AEA is Introduction to Digital Technology is the foundational course for Web & Digital Communications, Programming, Advanced Programming, Information Support & Services, and Network Systems pathways.

This course is designed for high school students to understand, communicate, and adapt to a digital world as it impacts their personal life, society, and the business world. Exposure to foundational knowledge in hardware, software, programming, web design, IT support, and networks are all taught in a computer lab with hands-on activities and project focused tasks.

Students will not only understand the concepts, but apply their knowledge to situations and defend their actions/decisions/choices through the knowledge and skills acquired in this course.

Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry.

Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of both the employability skills standards and content standards for this course.

Various forms of technologies will be highlighted to expose students to the emerging technologies impacting the digital world.

Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are taught in this course as a foundational knowledge to prepare students to be college and career ready.

The knowledge and skills taught in this course build upon each other to form a comprehensive introduction to digital world.

Physical Education

The purpose of this course is to provide students with the knowledge, skills and values they need to become healthy and physically active for a lifetime. This course addresses both the health and skill related components of fitness which are critical for students' success.

The main goal of this course is to also develop the physical skills necessary to be competent in many forms of movement, knowledge of team sports concepts such as offensive and defensive strategies and tactics, and appropriate social behaviors within a team or group setting in both competitive and non-competitive activity settings. The integration of fitness concepts throughout the content is critical to student success in this course and in the development of a healthy and physically active lifestyle.

Spanish (Elective)

The course introduces students to the effective learning of a new foreign language. The organization, sequencing and distribution of contents follow the policy established by the European Language Framework and the Curriculum Plan of Institute Cervantes. Both documents represent the core of the concept and are applied to the School's context, and to the cognitive development and motivation of the students.

By the end of the course students are expected to develop skills corresponding to A1.2. Level, i.e. they will be able to present themselves, introduce a person, talk about his/her family, school, everyday life and express likes, dislikes and preferences. The methodology aims to develop the communicative competence of the learners and fosters their four language skills. It supposes a lot of active participation, sometimes it combines with cross-curricular techniques.

Art (Elective)

This course offers students an introduction to Visual Arts. Students will explore the creative process through studio projects (drawing, painting, composition, sculpture, fiber, graffiti, decoupage, collage, written work, art appreciation and art history). The elements and principles of art will be emphasized as they apply to each artist's style. Some art projects will be self-directed, fueled by the students' own interests with research in art history, cultures, modern and contemporary art.

Course objectives: The students will identify and create artwork based on the elements of art and principles of design, demonstrate through their artwork how to use the elements of art to show movement and express feelings, recognize, compare and use different media to create their artwork, develop a respect and appreciation for the artwork of artists, including classmates' art, recognize and compare differences in several art mediums, create representational and abstract art, learn to create depth in 2-dimensional artwork using one point perspective, communicate thoughts, feelings and experiences to others through art, develop creative problem solving and higher-level thinking skills, learn about modern and contemporary art, develop critical thinking and imagination, understand terms that are basic to art media, procedures and techniques, as well as appreciation, maintain a sketchbook for a variety of drawings assignments to perfect their hand-eye ability and drawing skills.

Course topics: Fundamentals of Drawing and Composition, Elements of Art, Principles of Design, Art History and Art Criticism, Drawing, Color theory, Sculpture, Painting, Fibers, Graffiti, Decoupage, Collage.

Resource: *"The Visual Arts: A History "*, by Hugh Honour and John Fleming; *"The Art Teacher's Survival Guide for Elementary and Middle School"*, by Helen D. Hume; *"Children and their Art"*, by Michael Day and Al Hurwitz.