

# 8th Grade Course Descriptions

## REQUIRED CORE CLASSES

**Secondary Math:** The major work of 8th Grade requires students to apply and use operations with rational and irrational numbers; understand ratio concepts and apply proportional reasoning; simplify expressions and solve equations; and represent and analyze relationships in real world contexts. **Full Year**

**Secondary Math 8 Honors:** The major work of 8th Grade requires students to apply and use operations with rational and irrational numbers; understand ratio concepts and apply proportional reasoning; simplify expressions and solve equations; and represent and analyze relationships in real world contexts. **Full Year**

**Secondary Math I Honors:** The major work of the grade requires students to create, interpret, manipulate, and solve algebraic equations; understand, compare, and represent functions; describe characteristics of functions; understand, apply, and prove congruence and similarity as defined in terms of geometric transformations. **Full Year**

**Integrated Science:** Students will explore how matter is arranged into either simple or complex substances. Students will emphasize how substances store and transfer energy, which can cause them to interact physically and chemically, provide energy to living organisms, or be harnessed and used by humans. **Full Year**

**Integrated Science 8 Honors:** Develop a model to describe the scale and proportion of atoms and molecules. Obtain information about various properties of matter, evaluate how different materials' properties allow them to be used for particular functions in society and communicate your findings. Emphasize general properties of matter. Plan and conduct an investigation and then analyze and interpret the data to identify patterns in changes in a substance's properties to determine whether a chemical reaction has occurred. Obtain and evaluate information to describe how synthetic materials come from natural resources, what their functions are, and how society uses these new materials. Develop a model that uses computational thinking to illustrate cause and effect relationships in particle motion, temperature, density, and state of a pure substance when heat energy is added or removed. **Full Year**

**Language Arts 8:** This class is a survey of literature — short stories, novels, poems, videos, articles — which we will use to develop the literacy and critical thinking skills necessary to live productive and fulfilling lives. In order to gain these vital skills, we will read deeply, write clearly, listen empathetically, and speak respectfully. The reading and writing skills we gain from our class work will also prepare students for the state end-of-level test. **Full Year**

**Language Arts 8 Honors:** This is an intensive survey of literature — short stories, novels, poems, videos, articles — which we will use to develop the literacy and critical thinking skills necessary to live productive and fulfilling lives. In order to gain these vital

skills, we will read deeply, write clearly, listen empathetically, and speak respectfully. The reading and writing skills we gain from our class work will also prepare students for the state end-of-level test. **Full Year**

**U.S. History:** Students will learn how to analyze and record details from Primary and Secondary sources from United States history from Prehistory to 1870. Then Students will use their analysis in order to create thesis statements and claims about the people and events that they study. This will culminate in students being able to write an effective 3 paragraph essay by the end of the year. **Full Year**

**U.S. History Honors:** Students will study Primary and Secondary sources from United States history from Prehistory to 1870. Then they will use that information to complete large scale group projects. The types of projects are designed to imitate real world 21st century skills that help prepare them for potential future careers. **Full Year**

**Intermediate Fitness:** This class utilizes appropriate instructional practices to develop competence and confidence in a variety of lifetime activity and movement forms, including sports, outdoor recreation, and physical fitness activities. The emphasis is on providing success and enjoyment for all students. **Half Year**

**Health:** Health Education is dedicated to teaching students the skills they need to establish a healthy and safe lifestyle and enhance behaviors to resist unhealthy choices through adolescence. The course focuses on Healthy Foundations, Mental & Emotional Health, CPR/First Aid, Substance Abuse Prevention, Nutrition, and Human Development. **Half Year**

**Digital Literacy:** This course is a foundation to the digital world that provides a broad understanding of key applications, computing fundamentals, and living online. Students will have opportunities to use technology and develop skills that promote creativity, critical thinking, productivity, and collaboration in the classroom and day-to-day life. This course is aligned with the International Society for Technology in Education (ISTE) for Students, the K-12 Computer Science Standards, and industry standards for Digital Literacy Certification. The alignment of these national and international benchmarks will ensure that students complete this course as a prerequisite to transition successfully to the 9-12th grade digital studies courses. **Half Year**

## **ELECTIVE COURSE CLASSES**

**Foundation Art II:** Students learn the basics of drawing and sketching. **Half Year**

**Visual Arts:** Hands on experience creating 3 dimensional objects. **Half Year**

**General Crafts:** Students will learn basic crafting techniques, choosing from a range of materials and methods. **Half Year**

**Art History (Art II):** Students refine techniques used to create a variety of two-dimensional (2-D) artworks through developing skills in drawing, painting, printmaking, and collage. Students will learn about famous post artists, what art mediums they

worked with and their background in art, as well as, different techniques from famous post artists that they can apply in their own artwork. Students will learn about the art elements and how to do art, look at art, talk about art, and write about art. **Half Year**

**Advanced Band:** Advanced band students continue to learn how to improvise and expand their skills and music styles in this band ensemble. **Full Year**

**Advanced Orchestra:** This is a combined class of intermediate and advanced students and expands upon the concepts learned in Beginning Orchestra. The orchestra will attend festivals and will have solo experiences. Private lessons are strongly encouraged. **Full Year**

**Guitar I:** Focuses on real-world guitar skills such as chords, strumming, fingerpicking, rock and blues riffs, reading tablature and standard notation, and beginning pieces of music to perform and the holiday or spring concert **Half Year**

**Beginning Choir:** This course provides opportunities for students to develop their musical potential and aesthetic understanding through singing in a choral ensemble. Study includes the care and cultivation of a beautiful tone, aesthetic awareness, and ability to read music, the building of technical skills, team spirit and responsible rehearsal habits. Attention will also be given to relating their music experiences to personal development. **Half Year**

**Intermediate Theater:** Intermediate Theater is a course for students that have an interest in theatrical arts. Students in this class will learn how to perform and speak in front of an audience, how to work and create a scene, stage movement, character creation, and other aspects of the theater. Combined class of 8th and 9th graders. **Half Year**

**Advanced Theater:** This is a course for students that have completed a drama course before taking this one. Students in this class will practice and apply their knowledge of performance, performance techniques, theater history, social drama, and other aspects of theater. Combined class of 8th and 9th graders. **Full Year**

**Stagecraft 8:** Stagecraft is a course for students that are interested in the technical side of theater. Students in Stagecraft will learn and apply their knowledge of theater design, including set, lighting, sound, and other technical aspects of theater, helping students build a strong foundation in technical theater. Combined class of 8th and 9th graders. **Half Year**

**Spanish I:** Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions. Students will understand and interpret written and spoken language on a variety of topics. Students present information, concepts, and ideas to an audience of listeners readers on a variety of topics. **Full Year**

**Family and Consumer Sciences (FACS):** This course provides students the opportunity to learn essential life skills. It allows them to develop skills in food and nutrition, childcare and safety, interior design, clothing construction and style, consumerism, family relationships, personal responsibility, and job-related tasks. **Half Year**

**Exploring Technology A:** This class is a STEM elective with a curriculum in Automation and Robotics (AR). Students trace the history, development, and influence of automation and robotics as they learn about mechanical systems, energy transfer, machine automation, and computer control systems. Students use the VEX Robotics® platform to design, build, and program real-world objects such as traffic lights, toll booths, and robotic arms. **Half Year**

**Exploring Technology C:** Design and Modeling (DM) provides students opportunities to apply the design process to creatively solve problems. Students are introduced to the unit problem in the first activity and are asked to make connections to the problem throughout the lessons in the unit. Students learn and utilize methods for communicating design ideas through sketches, solid models, and mathematical models. Students will understand how models can be simulated to represent an authentic situation and generate data for further analysis and observations. Students work in teams to identify design requirements, research the topic, and engage stakeholders. Teams design a toy or game for a child with cerebral palsy, fabricate and test it, and make necessary modifications to optimize the design solution. The students will use Computer Assisted Drawing (CAD) program and 3D printers to prototype their innovations. **Half Year**

**Coding Technology A:** This is an intro to Python programming. Python is one of the most used programming languages for professionals today. In the class we jump into how to code with python and how to do some physical computing with Arduino boards. **Half Year**

**Beginning Weight Training:** This class gives students the opportunity to learn weight training concepts and techniques used for obtaining optimal physical fitness. Students will benefit from comprehensive weight training and cardiorespiratory endurance activities. **Half Year**

**Dynamic Fitness:** Intermediate Team Sports/Dynamic Fitness utilizes appropriate instructional practices to develop competence and confidence in a variety of lifetime activity and movement forms, including sports, outdoor recreation, and physical fitness activities. The emphasis is on providing success and enjoyment for all students. **Half Year**

**Creative Writing:** Explores different genres of writing, through both reading and writing, as well as the other necessary elements needed to improve writing and composition skills. This course is designed to inspire students to develop original pieces and ideas. Through writing and thinking students will learn to become better readers,

writers, and thinkers. Writing genres covered are autobiographies, family storytelling, fairy tales, fantasies, short stories, and journals. **Half Year**

**Debate:** Students will learn how to speak and communicate in a professional and effective manner. They will learn how to prepare for and debate against other students. Class assignments will consist of speeches and a variety of debate types. **Half Year**

**AVID:** This targets students in the academic middle with the desire to go to college and the willingness to work hard. Often, students will be the first in their families to attend college, and come from groups traditionally underrepresented in higher education. These are students who are capable of completing rigorous curriculum with the support of the AVID Elective class. This class places students on the college track, requiring students to enroll in the most rigorous courses that are appropriate for them, such as Honors and Advanced Placement®. To support them in the rigorous coursework, AVID students learn organizational and study skills, develop critical thinking, learn to ask probing questions, receive academic help from peers and college tutors, and participate in enrichment and motivational activities to make their college dreams reality. **Full Year**

**Latinos in Action:** Latinos In Action is a program designed to help Latino youth meet their potential by leveraging their personal assets, excelling in education, serving the community, and being a leader. Our model facilitates opportunities to develop that potential for students from elementary school through college. This class does require application and teacher approval. **Full Year**

**Peer Tutoring:** Peer Tutoring is an opportunity to work with students with different abilities. You will learn to help them with their academics and life skills. We have a Treat Trolley and recycling program that the students participate in. We use these programs to teach the students money management and work skills. This is a great opportunity to earn volunteer hours for your college applications and learn skills to work with others in the field of Special Education. **Half Year**