

## Middle School Course Descriptions

### ***MATH***

#### **6<sup>th</sup> Grade Math (1.0 Credit)**

Math 6 focuses on the following concepts: Ratios and Rates, Division of Fractions, Expressions and Equations, and Statistical Reasoning. Students will be expected to have a strong commitment to their work and demonstrate excellent behavior.

#### **7<sup>th</sup> Grade Math-Intermediate Math 1 (1.0 Credit)**

Intermediate Math 1 focuses on the following concepts: Proportional Relationships, Expressions and Linear Equations, Geometry, and Drawing Inferences. Students will be expected to have a strong commitment to their work and demonstrate excellent behavior.

#### **8<sup>th</sup> Grade Math-Intermediate Math 2 (1.0 Credit)**

Intermediate Math 2 focuses on three critical areas: applying equations in one and two variables, using functions to describe quantitative relationships, and applying the Pythagorean Theorem. Students will be expected to have a strong commitment to their work and demonstrate excellent behavior.

#### **9<sup>th</sup> Grade Math-Secondary Math 1 (1.0 Credit)**

Secondary Math 1 deepens and extends understanding of linear relationships, and extends that knowledge to exponential phenomena. Secondary Math 1 also uses properties and theorems involving congruent figures to deepen and extend understanding of geometric knowledge from previous grades. Secondary 1 will tie together these algebraic and geometric ideas. Students will be expected to have a strong commitment to their work and demonstrate excellent behavior.

#### **10<sup>th</sup> Grade Math-Secondary Math 2 (1.0 Credit)**

The focus of Secondary Math 2 is on quadratic expressions, equations, and functions and on comparing their characteristics and behavior to those of linear and exponential relationships. Students will be expected to have a strong commitment to their work and demonstrate excellent behavior.

#### **11<sup>th</sup> Grade Math-Secondary Math 3 (1.0 Credit)**

The content is grouped into four critical areas, organized into units. Students apply methods from probability and statistics to draw inferences and conclusions from data. Students expand their repertoire of functions to include polynomial, rational, and radical functions. They expand their study of right triangle trigonometry to include general triangles. And, finally, students bring together all of their experience with functions and geometry to create models and solve contextual problems. Students will be expected to have a strong commitment to their work and demonstrate excellent behavior.

### ***LANGUAGE ARTS***

#### **9<sup>th</sup> Grade Language Arts (1.0 Credit)**

Students will be studying different literary texts as well as enhancing their writing, grammar, and speech skills. “Lord of the Flies”, “Hamlet”, and “A Christmas Carol” are a few examples of what will be read in this class, as well as various short stories, poems, and articles. Students will participate in a variety of activities to further their learning, including: reciting Shakespeare from memory, researching and reporting on various topics, defending their opinion in an argumentative essay, etc...

#### **8<sup>th</sup> Grade Language Arts (1.0 Credit)**

Students will be studying different literary texts as well as enhancing their writing, grammar, and speech skills. “To Kill a Mockingbird” is one of the main texts we focus on in this course, but we will be covering various other literary works including short stories, poems, articles, etc.

#### **7<sup>th</sup> Grade Language Arts (1.0 Credit)**

7th Grade Language Arts- Students will study fundamentals of reading and writing strategies. Specifically, students will learn to analyze texts using literary devices, identify plot structure, understand characterization, and recognize types of conflict. Students will be able to identify key features of narrative, informative, and persuasive writing. Students will demonstrate the 6 traits of writing and make connections between grammar and writing. Students will read a variety of poems, speeches, short stories, and novels in class. Novels may include, but are not limited to: Dr. Jekyll and Mr. Hyde, The Giver, The Diary of Anne Frank, and The Outsiders.

### **6<sup>th</sup> Grade Writing (1.0 Credit)**

Students will study fundamentals of writing strategies. Students will be able to identify key features of narrative, informative, and persuasive writing. Students will demonstrate the 6 traits of writing and make connections between grammar and writing. Students will learn to recognize types of conflict through a variety of short stories, narratives, poems, and novels we read in class to support our writing.

### **6<sup>th</sup> Grade Reading (1.0 Credit)**

Students will develop a positive relationship with reading by exploring different types of genres, settings, and conflicts. Students will study a variety of books with the class, as well as one book each quarter outside of class that fits the unit's theme. Students will learn to analyze texts using literary devices, identify plot structure, understand characterization, and recognize types of conflict.

## ***HISTORY***

### **6<sup>th</sup> Grade World History (1.0 Credit)**

In World History, we will be studying about some of the first great civilizations that sprung up when man went from a hunter/gatherer mentality to when nomadic tribes began to grow crops. In abandoning the hunting/gathering mentality, large cities began springing up in various parts of the ancient world. We will start our journey in Mesopotamia. We then travel through time and distance to study Egypt with their pharaohs and architecture they left for the world to enjoy for many centuries. From Egypt we will travel to Greece. We will study the culture of the Minoans, the culture of the Mycenaean's, as well as the different periods of Greece. From Greece, we will travel to Rome to study the Romans. We will look at their legacy they left for the world. We will spend a little time in the Middle Ages, primarily on the Vikings, because more and more information is being discovered every year which points to the Vikings discovering North America about 500 years before Columbus. Then it is onto the Age of Enlightenment and the French Revolution.

### **7<sup>th</sup> Grade History (.5 Credit)**

This course is an overview of the significant events, people diverse culture, and issues that have influenced the development of Utah. The course will focus on governmental, historical, social, political, economic, and geological factors in our state with attention to the development of higher level thinking skills.

### **8<sup>th</sup> Grade U.S. History (1.0 Credit)**

In U.S. History, we will travel to North America with the first explorers. We will discuss and research the different explorers and their contributions to the knowledge base of those who came after them. The early attempts at settling in America, including both failures and successes will become the basis for looking at the lives of settlers during the earlier portions of colonization of the eastern edge of America. We will study the causes of the French and Indian War and how that war contributed to the American Revolution. We will study the American Revolution and identify other revolutions around the world which used our conflict as a guide for their own revolutions. We will be studying the Declaration of Independence, the Constitution, and all of the amendments. After the U.S. Revolution, we will go through the post revolution period, which includes the Louisiana Purchase, Lewis & Clark, Native Americans, the industrial revolution, on into the Civil War.

### **9<sup>th</sup> Grade World Geography and Civilization: (1.0 Credit)**

World Geography and World Civilizations are combined classes with Geography covered first semester and Civilizations covered second semester. Geography focuses on the geography mode of inquiry, the cultures of

the world, physical geography, map skills, economic systems of the world and governments. World Civilizations explores world history from ancient to modern times and global issues. Major religions will be discussed as these influence their particular region. This course is only taught in the 9<sup>th</sup> grade and is a High School graduation requirement.

## ***SCIENCE and TECHNOLOGY***

### **6<sup>th</sup> Grade Science (1.0 Credit)**

The sixth grade SEEd standards provide a framework for student understanding of the cycling of matter and the flow of energy through the study of observable phenomena on Earth. Students will explore the role of energy and gravity in the solar system as they compare the scale and properties of objects in the solar system and model the Sun-Earth-Moon system. These strands also emphasize heat energy as it affects some properties of matter, including states of matter and density. The relationship between heat energy and matter is observable in many phenomena on Earth, such as seasons, the water cycle, weather, and climates. Types of ecosystems on Earth are dependent upon the interaction of organisms with each other and with the physical environment. By researching interactions between the living and nonliving components of ecosystems, students will understand how the flow of energy and cycling of matter affects stability and change within their environment.

### **7<sup>th</sup> Grade Science (1.0 Credit)**

The seventh grade SEEd standards look for relationships of cause and effect which enable students to pinpoint mechanisms of nature and allow them to make predictions. Students will explore how forces can cause changes in motion and are responsible for the transfer of energy and the cycling of matter. This takes place within and between a wide variety of systems, from simple, short-term forces on individual objects to the deep, long-term forces that shape our planet. In turn, Earth's environments provide the conditions for life as we know it. Organisms survive and reproduce only to the extent that their own mechanisms and adaptations allow. Evidence for the evolutionary histories of life on Earth is provided through the fossil record, similarities in the various structures among species, organism development, and genetic similarities across all organisms. Additionally, mechanisms shaping Earth are understood as forces affecting the cycling of Earth's materials. Questions about cause and effect and the ongoing search for evidence in science, or science's ongoing search for evidence, drive this storyline.

### **8<sup>th</sup> Grade Science (1.0 Credit)**

The eighth grade SEEd standards describe the constant interaction of matter and energy in nature. Students will explore how matter is arranged into either simple or complex substances. The strands 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. Matter and energy cycle and change in ecosystems through processes that occur during photosynthesis and cellular respiration. Additionally, substances that provide a benefit to organisms, including humans, are unevenly distributed on Earth due to geologic and atmospheric systems. Some resources form quickly, allowing them to be renewable, while other resources are nonrenewable. Evidence reveals that Earth systems change and affect ecosystems and organisms in positive and negative ways.

### **9<sup>th</sup> Grade Biology (1.0 Credit)**

The Biology Core Curriculum has two primary goals: (1) students will value and use science as a process of obtaining knowledge based on observable evidence, and (2) students' curiosity will be sustained as they develop and refine the abilities associated with scientific inquiry. Theme The Biology Core has three major concepts for the focus of instruction: (1) the structures in all living things occur as a result of necessary functions. (2) Interactions of organisms in an environment are determined by the biotic and abiotic components of the environment. (3) Evolution of species occurs over time and is related to the environment in which the species live.

### **9<sup>th</sup> Grade Exploring Computer Science (.5 Credit)**

This course teaches the creative, collaborative, interdisciplinary, and problem-solving nature of computing. This course will address digital social and ethical issues while delivering foundational computer science knowledge to students. ECS fills the Digital Studies high school graduation requirement for the state of Utah.

### **8<sup>th</sup> Grade Digital Literacy (.5 Credit)**

This course is a foundation to computer literacy. Students will have opportunities to use technology and develop skills that encourage creativity, critical thinking, productivity, and collaboration in the classroom and day-to-day life. This course aligns with the benchmarks of basic understanding of digital devices and software that will help ensure students to meet the transition for 9 – 12<sup>th</sup> grade digital study courses.

### **7<sup>th</sup> Grade CCA (1.0)**

College and Career Awareness offers exploration and preparation in college and career pathways focusing on jobs that are high skill and high demand, as well as satisfying and financially rewarding. The College and Career Awareness course is designed to help students identify their interests, abilities, and skills. With appropriate developmental information related to careers, educational pathways, and self-knowledge, students are able to begin to make college and career goals for the future. College and Career Awareness is designed to acquaint students with the Utah labor market and the employment opportunities for which they can prepare by defining a College and Career Ready Plan.

### **6<sup>th</sup> Grade ALEKS/Keyboarding (1.0 Credit)**

The student will demonstrate correct keyboarding techniques while increasing speed and maintaining accuracy, use the computer 10-key pad, and be able to identify and use proofreader's marks. Students will also use ALEKS daily. ALEKS is an individualized mathematics learning system tailored to support the students in their current math class. Additional subjects, such as, Digital Citizenship, Research Resources, and Google Tools will be taught.

## ***PE & Health***

### **6-8 PE (.5 Credit each year)**

The purpose of physical education is to help students achieve high levels of learning through physical and fitness activities. Instruction includes an introduction to fitness and training principles, and exposure to activities that can enhance health-related fitness. Students will also be introduced and exposed to fundamental skills in various physical activities and sports (including team and individual sports). Emphasis is placed on effort, work ethic, sportsmanship, and developing healthy attitudes towards physical activity and healthy lifestyles. Students are required to purchase PE uniforms.

### **9<sup>th</sup> Grade PE (.5 Credit)**

The purpose of physical education is to help students achieve high levels of learning through physical and fitness activities. This course will utilize project based learning to guide students to knowledge acquisition, and steer them towards high levels of personal achievement. Emphasis is placed on effort, work ethic, sportsmanship, personal accountability, and developing healthy attitudes towards physical activity and healthy lifestyles. Students are required to purchase PE uniforms.

### **8<sup>th</sup> Grade Health (.5 Credit)**

The purpose of this course is to empower students to take control of their own physical, mental, emotional, and social wellbeing. Students will be offered tools and ideas that are intended to get them to start thinking about their own well-being, and to help guide them to make safe and healthy decisions to reduce risks and improve their quality of life.

## ***ELECTIVES***

### **World of Dinosaurs (.5 Credit)**

This class focuses on the evolution, classification, and behavior of dinosaurs and their relatives both alive and extinct. The history of Earth, death of the dinosaurs, and the role of dinosaurs in popular culture will also be discussed. Major fossil groups will be examined to understand the biological and geological evidence of past organisms.

### **Astronomy (.5 Credit)**

This class provides an introduction to the concepts of modern Astronomy. Students will study the history of astronomy and discoveries that shape our current view of space. The objects in our solar system including the sun, planets, dwarf planets, moons, and other objects will be explored. Last, students will investigate stellar evolution and the life cycles of different types of stars in the universe and their eventual fate as white dwarfs, planetary nebula, neutron stars, black holes, and quasars.

### **Robotics: (.5 Credit)**

FIRST LEGO League challenges kids to think like scientists and engineers. During the INTO ORBIT season, teams will choose and solve a real-world problem in the Project. They will also build, test, and program an autonomous robot using LEGO® MINDSTORMS® technology to solve a set of missions in the Robot Game. Throughout their experience, teams will operate under the FIRST signature set of Core Values, celebrating discovery, teamwork, and Gracious Professionalism®.

### **Yearbook (1.0 Credit)**

Students will study elements of digital design such as padding, font rhetoric, and style. Students learn photography basics such as cropping, background, foreground, focus, lighting, and rule of thirds. Students design and promote marketing materials around the school. Students will conduct research on journalism techniques and presentation etiquette. These skills support our primary goal of collaborating to design, create, market, and publish the elementary and middle school yearbooks.

### **Fandom-Literature Elective (.5 Credit)**

Students will enjoy reading and analyzing different popular literary texts. The following are examples of what may be included in this course: “The Lord of the Rings”, “Harry Potter”, “Jurassic Park”, “Percy Jackson”, Marvel & D.C. comics, etc... The objective of this course is to have students expand their knowledge of and interest in various popular texts. We will be exploring different themes within the texts as well as analyzing and dissecting plot points, character dynamics, etc...

### **Creative Writing (.5 Credit)**

Students will enjoy the freedom of written expression through different modes, including: poetry, short stories, novels, songs, plays, letters, etc... The Plot Pyramid is used as a guide for student stories to flourish as well as prompts to help usher them in different directions regarding themes and genres. Students do NOT need to be highly skilled at writing to enjoy this class. There is frequent peer feedback given to students who choose to share their stories with the class, giving them a chance to improve their writing and story-telling. Creativity is highly encouraged!

### **American Sign Language (1.0)**

Students will gain a basic knowledge of ASL and Deaf Culture. They will learn a wide variety of vocabulary, basic sentence structures, and culturally appropriate behaviors allowing them to function comfortably in a wide variety of situations. Focus is primarily on comprehension with some expression.

### **Hope Squad (.5 Credit)**

Hope Squads are the eyes and ears of your school. They are comprised of students who are trained to watch for at-risk students—provide friendship, identify warning signs, and seek help from adults. In Hope Squad you will learn what the warning signs are for stress, anxiety, depression and suicide. You will learn how to effectively communicate with individuals who are suffering from a mental health issue and how to properly and respectfully report these issues with an adult.

### **Sewing/Cooking (.5 Credit)**

In this class you will learn the basics of cooking instructions and basic sewing instructions. In cooking class, students you work together as groups at least once a week learning techniques skills and basic understanding of nutrition and food science. During sewing class students will work individually, mastering basic construction skills and understanding of fabric identification and sewing terminology. Students will complete several simple sewing projects.

### **Coding with Python (1<sup>st</sup> semester) (.5 Credit)**

Come learn the basics of Python, one of the fastest growing computer languages! The Python programming language has been developed as a more concise, straightforward, and easy-to-understand alternative to other major languages such as C and Java. Python is also preferred for big data projects.

### **Coding in MakeCode, Minecraft, and Maker Projects (2<sup>nd</sup> semester) (.5 Credit)**

MakeCode is a new programming language by Microsoft that will enable us to code in Minecraft as well as build projects with BBC Microbits and Adafruit Circuit Playground Express! Come see what we can make!

### **Film (.5 Credit)**

Learn about film history, script writing, editing, and acting for film. Watch and discuss various movies in class, analyzing what the filmmakers' intents were. Create your own short films in class.

### **Intro to Theater (.5 Credit)**

Never taken theater or acted before? No worries! Learn about the basics of acting and working backstage. Students will learn how to deal with stage fright, act in scenes with partners, play improvisation games and use their voice and movement to develop characters and create meaning.

### **Theater 2 (.5 Credit)**

For those who have taken theater before and understand the basics of acting and design. Students will hone skills such as communication, portrayal of emotion, creating realistic characters, and storytelling. Students will be given opportunities to perform, write original scripts, play improvisation games, and learn about theater history.

### **Theater Productions/Advanced Drama (.5 Credit)**

Want to actually be in a play and perform for others? Then take Theater Productions where we will have in class rehearsals throughout the semester. You will be given opportunities to grow and improve your acting skills as we refine our performance. The play that the class will rehearse and perform will be announced by the second week of school and the class performances will be in November or December.

### **Stage Crew (.5 Credit)**

Introductory technical course. Learn about all of the behind the scenes jobs in theater. Get a chance to create sets and props, learn about set painting, create makeup and costume designs, and experiment with lighting and sound design in the class. You will get a general overview of each different area and then choose an area of design or crew that you would like to focus on.

### **Painting (.5 Credit)**

This class with focus on learning and improving painting skills. We will work with Watercolor, Acrylic, Tempera and Gouache paints. Some of the projects we will create are a unique color wheel, a triptych landscape, and a mixed media painting that uses ink and washable tempera paint.

### **Fine Crafts (.5 Credit)**

For this class we will explore a variety of Fine Craft mediums including bookbinding, etching, and jewelry making. For some of the projects you will be able to create your own leather wallet or coin purse, as well as trying your hand at chainmail. You will also be able to try a *newer* craft and create your own 3D print.

### **Art Foundations (.5 Credit)**

This class will cover both elements and principles of art, as well as the use of basic art materials. We will do a variety of projects using those basic materials, including drawing, painting, and 3D design. We will also learn how to use the elements and principle of art to strengthen your artwork. Each school year Art Foundations will be themed with either, Star Wars, Disney, or Harry Potter. There will be some projects and class games based around those themes.

### **Ceramics (.5 Credit)**

In this class we will be working with firing clay to create a variety of projects. We will learn techniques for working with clay like slab work, coiling and "score-slip-stick". Some of the projects we will make will be mugs, memory boxes and whistles. After the projects have been made they will be fired a second time to glaze them.

**3D Printing (.5 Credit)**

This class will focus on learning how to create your own 3D models with Tinkercad. Each student will be able to make and print several models throughout the semester. There will be STEM based activities in class, as well as some 3D design challenges.

**Printmaking (.5 Credit)**

This class will focus on the art of printmaking. We will try various printmaking techniques including linoleum block printing, etching, and silk screen printing to name a few. For one of the activities, each student will get to create their own unique print on a cinch sack.

**Dance (.5 Credit)**

Beginning level course builds dance knowledge and skills in technique, improvisation, choreography, artistic expression, performance, and healthy life skills.

**Fitness Strategies (.5 Credit)**

The purpose of this class is to teach basic principles and fundamentals of physical conditioning, fitness, and athletic skill acquisition. This will be done by some traditional lecture style instruction, as well as, plenty of physical activity and training. Students will be exposed to, and get to experience, various styles of training and exercise. The goal is to not only provide an opportunity for exercise, but also, to give students tools to enable them to effectively pursue their fitness and athletic goals outside of class/school as well. This course offers a more in depth look into many of the principles introduced in PE class, and provides a more hands on experience.