

## ***Seventh and Eighth Grade Curriculum Guide 2008-2009***

### **7<sup>th</sup> and 8<sup>th</sup> Grade Humanities: American History and Literature**

The seventh and eighth grade humanities curriculum includes a two-year sequence of study of American history paired with American literature. The A year curriculum includes a study of America from native civilizations and the establishment of European settlements to the Civil War period with literature chosen to reflect those periods. The B year curriculum includes a study of the years from the Civil War to the civil rights era along with modern American literature. Students also explore the art, music, and culture of the periods studied through different media and cross-curricular activities. They also develop the reading, writing, speaking, and research skills necessary for engaging in the study of the humanities.

**English:** The seventh and eighth English course focuses on the study of modern American literature and key components of the writing process. The literature students read in class underscores the themes of the changing character and diversity of the American experience with an emphasis on freedom and pivotal moments in American history. Additionally, students work to improve writing and editing skills in order to prepare for high school. Assessment is based on a variety of methods, including creative writing, essay writing, group and individual projects, and tests. Guiding questions include: How can the study of American literature inform our understanding of the United States historically and in the present? What does it mean to be an American? How do time period and context influence people's actions and attitudes? How does culture influence who we are as individuals and members of a community? Each of these questions will be examined in class through discussion, project-based assignments, oral and written presentations and a variety of collaborative and individual tasks.

**B Year Literature:** Students read and analyze some of the salient works of Twentieth Century American literature. Through this study, they identify major themes in contemporary American literature, read critically and for enjoyment. The American literature selected for the year corresponds with the historical periods examined in social studies in order for students to gain greater understanding of the culture and life experiences of the time period. Emphasis is also placed on connecting themes from the literature to students' own life experiences and current global issues. Major works read in class may include literature by Jack London, Ernest Hemingway, Langston Hughes, Lois Lowry, John Steinbeck, Jean Wakatsuki Houston, and Harper Lee. Additional authors, folktales, myths, poems, short stories, plays, speeches and multimedia are also included in the course to extend understanding of literature, history, or themes drawn from the humanities courses. In addition to assigned work, students are expected to spend time each week reading a book of their own choice. Once a trimester, students have the opportunity to present on a book agreed upon by both student and teacher.

**A Year Literature:** Students read and analyze some of the salient works of early American literature. Through this study, they identify major themes in pre-colonial to

post Civil War American literature and read both critically and for enjoyment. The American literature selected for the year corresponds with the historical periods examined in social studies in order for students to gain greater understanding of the culture and life experiences of the time period. Emphasis is also placed on connecting themes from the literature to students' own life experiences and current global issues. Major works read in class may include literature by Mark Twain, Walt Whitman, Henry David Thoreau, Stephen Crane, Frederick Douglas, and Emily Dickinson. Additional authors, poems, short stories, and plays are also included in the course. In addition to assigned work, students are expected to spend time each week reading a book of their own choice. Once a trimester, students present on a book agreed upon by both student and teacher.

**Writing:** It is essential for middle school students to gain confidence in their skills as writers. In this course, students journal and write poetry, memoir, and critical essay. Students review more difficult components of grammar with the goal of incorporating concepts into their own writing and editing processes. Specifically, students begin honing their essay writing skills with 1-paragraph essays, proceeding to three and five paragraph works. Students write effective and convincing essays that include a strong thesis, an argument supported with evidence, and a conclusion that displays insight into a topic of study. Students have the opportunity to write both creative and expository pieces with a priority placed on enhancing their abilities to express ideas and complete a comprehensive written analysis. Ultimately, writing is both an individual and collaborative process, and time is spent in class working with peers as well as individually revising written work.

**Listening & Speaking:** Learning effective listening and speaking skills is essential for students to promote their ideas, help effect change in their global community, and build critical thinking skills through conversations with both adults and their peers. Once a trimester, students have the opportunity to present on a book agreed upon by both student and teacher. Students also present two formal speeches in front of the class: one of persuasive nature and one of instructive nature. With the collaboration of an external instructor, the students develop storyboards, write scripts, produce, film, and act in short video pieces related to major themes and literature being discussed this year. Students also engage in debates and inquiry-based problem solving involving current events.

**Grammar and Spelling:** An understanding of grammar is essential in order for students to improve their skills as they become more advanced writers and communicators. Lessons focus on reviewing previous grammar concepts and introducing complex grammar models. In particular, students review: parts of speech, phrases (adjective and adverb phrases, prepositional phrases), misplaced and dangling modifiers, clauses, subject/verb agreement, complements, figures of speech, active and passive voice, use of comma and semicolon, capitalization, and types of sentences. Spelling concepts and rules are reviewed. Through study of both spelling and grammar, students develop skills as editors of their own writing and their peers' in order to immediately utilize these concepts. The primary text used for grammar in this course is *Exercises in English Grammar: Book I*. The primary text for spelling is *Megawords 7*.

**Vocabulary:** Studying vocabulary helps students develop their skills as readers, writers, and speakers. Vocabulary development in the middle school focuses specifically on Latin roots and contextual usage. Students develop skills to first learn new vocabulary words, recognize them in context and finally use them in their own speaking and writing. *Vocabulary from Classical Roots B* is the text used for vocabulary lessons.

**B Year History:** The focus of the 2008-9 American History course is from the Civil War to the present. Using *The American Nation* and primary sources as a framework, the class explores the social, economic, and political history as well as the events that have shaped the country we live in today. The class examines how interpretations and meanings of freedom, equality, slavery and democracy have developed over time. Guiding questions include: How can the study of American history inform our understanding of our country today? How is American history to be understood in a global context? How have geography, environment and expansion shaped life and events in this country? What are our responsibilities as citizens of the United States?

Through class discussion, response questions and careful study of primary documents, students learn to construct and articulate strong and informed arguments with solid supporting evidence. Students develop close reading skills by learning to identify key and supporting themes and arguments, and then summarizing, critiquing and elaborating on these arguments in class. Mini-research projects and presentations allow students the opportunity to gather, organize and synthesize information. The course is writing intensive with major assignments and projects coordinated with English assignments. Along with reading every night, students respond to questions and formulate their own questions for discussion. Through practice essays, students learn to write clearly and concisely utilizing historical evidence to support their arguments and convey meaning. By examining primary documents contextually and participating in such activities as mock trials, debates and writing editorials for period newspapers, students practice adopting different perspectives in order to increase their understanding of history and develop a window into the thoughts and opinions of the past.

**A Year History:** The focus of the A year is early American history. Using *The American Nation* and primary sources as a framework, the class explores early American civilization through the Civil War. Students study the social, economic, and political history as well as the events that have shaped the country we live in today. The class examines how interpretations and meanings of freedom, equality, slavery, and democracy have developed over time. Guiding questions include: How can the study of American history inform our understanding of our country today? How is American history to be understood in a global context? How have geography, environment and expansion shaped life and events in this country? What are our responsibilities as citizens of the United States?

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### **7<sup>th</sup> and 8<sup>th</sup> Grade Mathematics**

The focus of the seventh and eighth grade mathematics courses is to develop a mastery of algebra, the basic language of science and the foundation of higher mathematics. Through developing problem-solving abilities and demonstrating skills in hands-on, applied math projects, students pass through the gateway to higher mathematics.

Seventh grade students begin their exploration of higher mathematics with a study of mathematical ways of thinking, number sequences, functions, symmetry, and mathematical curves. The primary text for this unit is *Mathematics, A Human Endeavor, 3rd ed.*, by Harold Jacobs. Mid-year, students begin to formalize their study of algebra as they begin work in *Algebra I: Expressions, Equations and Applications*, by Paul Foerster. Students explore the use of algebraic expressions and equations; master operations with signed numbers; explore polynomials and factoring; and briefly study quadratic equations. By year's end, each seventh grader is comfortable assigning and substituting variables; manipulating equations to express a desired variable; solving equations containing a single variable; and graphing linear and parabolic functions.

Students in eighth grade continue work in *Algebra I: Expressions, Equations and Applications*. They learn the utility of the variable; the use of formulae; equations with two unknowns; the complexities of rational and radical algebra; inequalities; and advanced functions and their graphs. For much of the year, students focus on solving word problems and applying algebra as a tool for prediction and modeling. At the completion of this course, eighth grade students have a strong foundation in algebra that prepares them for the higher mathematics courses offered in high school.

In addition to mastering the mechanics of algebra, each student is encouraged to further develop his/her own creative problem solving abilities. This objective is accomplished through a variety of challenging problems calling on varied techniques to reach solutions. Students study problem solving techniques such as guess and check, finding a pattern, and matrix logic, as presented in the text *Crossing the River With Dogs* by Ken Johnson. Additionally, students complete a spiral review of topics such as probability, graphical analysis, statistics, and geometry. This review is facilitated with *ALEKS*, an online program that directs students to continue work in areas that are identified as weaknesses.

Throughout, each student is encouraged to think and reason while drawing on all of his/her previous mathematics study.

Hands-on applied math/science projects such as building cranes and catapults or calculating stream velocities and discharge give students the opportunity to practice and develop skills such as estimation, technical drawing, the use of functions and equations to predict outcomes, data analysis and statistics. Students prepare for standardized tests by practicing test-taking strategies, working on computational speed in daily warm-ups and completing spiral review of skills and material from previous years. Students are challenged by this demanding yet rewarding course as they explore the power and utility of algebra.

### **7<sup>th</sup> and 8<sup>th</sup> Grade Science:**

**Field Studies and Environmental Science:** The field studies and environmental science course is a field intensive, integrated environmental science course, drawing upon the disciplines of biology, ecology, geology, physics, and chemistry. Students begin the year exploring their own landscape, the San Miguel watershed, and then apply their findings to further their understanding of other watersheds around the globe. Each student finishes the course with a deeper understanding of what ecological role we each play in our world, locally, as well as globally.

In order to gain an understanding of the San Miguel watershed, students study the local mountains, forests and rivers. Topics explored in this unit include local life zones and ecosystems, dendrochronology, describing and quantifying biodiversity, mapping and hydrology. Students then complete a comparative study of desert ecology and geology in a unit that culminates with a multi-day trip to the Canyonlands. The forest and river sites students mapped earlier in the year are then used as winter field sites as students study winter ecology and cold weather physiology. Students then study regional weather trends and global climate patterns.

With a solid understanding of their local environment, the focus shifts to more distant watersheds and exotic ecosystems. Students draw connections between other watersheds and explore how their actions in Telluride, at the head of the San Miguel Watershed, have far-reaching consequences reaching the Colorado River and beyond. Students explain similarities and differences between the San Miguel watershed and a watershed of their choice, taking into account biomes, geology, hydrodynamics, resources, and human impact as they prepare and deliver a poster presentation of another watershed to the class.

Throughout the year, each student thinks critically about scientific issues on both a local and global level. Through weekly readings in current events from publications such as the *New York Times* or *Discover* and role-playing debates about water rights and mining in the western U.S., students will examine what role we play, how we impact the environment, in both negative and positive ways, and how our choices have long lasting

consequences. This curriculum is sure to challenge students to think in new ways, see the world in a broad range of perspectives, and closely examine their local biome.

**Physical Science:** The physical science course, a combination of chemistry and physics, introduces students to the basics of laboratory science. In this course, students regularly employ the scientific method to understand questions and uncover the theories, principles and laws that govern the physical world.

Students begin the year exploring mass, volume, density, force, motion and energy. In this unit they build and analyze model structures such as cranes, bridges and towers and study projectile motion while building catapults. Then the class examines matter's building blocks, states, and properties as they explore the properties of solids, liquids and gasses. This unit leads into a study of the periodic table and an introduction to chemistry. Students learn basic lab safety as they perform experiments such as electroplating and electrolysis, and learn the proper techniques of glass bending to make basic laboratory apparatus. Students complete individual research projects on fuel cells, alternative energies and the prospect of hydrogen power. To finish the year, the class studies forensic science. In this unit, students combine their knowledge of physics, chemistry and biology as they learn to analyze fingerprints, hair samples, and hand writing samples. Students learn to blood-type and examine the role of DNA as evidence. In a mystery powder unit, students use various lab tests to determine the composition of various unknown powders. Finally, the class combines reasoning and laboratory skills to solve a mock crime.

Formal documentation of experiments and findings is an essential skill for success in the advanced science classes taught in high school. Throughout the year, students write ever-increasingly detailed lab reports for experiments and projects. Students learn to analyze error both quantitatively and qualitatively. Throughout the course, students regularly call on their developing algebra skills as they work with formulas, balance chemical equations and graph experimental results. By the end of the course, students can clearly explain the laws governing the physical realm, document their work in detailed lab reports, and design and carry out safe and informative laboratory projects and experiments.

### **7<sup>th</sup> Grade Spanish**

This group is at an intense stage of language learning. They have built up a substantial vocabulary, investigated sentence structure and practiced verb conjugation. Students now review what they have learned and explore more verbs, verb conjugations, and complex sentences. Spanish is spoken in the classroom for instructional purposes and used by students during performance-based projects and skits. Service projects and interaction with the Hispanic community provide experiences to bolster classroom learning.

The curriculum provides a foundation in the 5 C's of the National Standards for foreign language instruction:

- Communication in the target language
- Connections with other disciplines
- Comparisons that develop insight into the nature of language and culture
- Cultural experiences
- Communities – students learn how to communicate in a multilingual community

Students receive formal language training and explore other cultures and countries through the use of multi-media. Their understanding is at the stage where they can grasp the ideas being portrayed by native speakers, and they are starting to read simple passages in Spanish. This group uses the *¡Exprésate! Level 1* textbook by Holt as well as the on-line textbook to complete homework assignments. The Holt program is unique because it integrates on-line learning and has native speakers introducing new concepts and vocabulary for each chapter.

### **8<sup>th</sup> Grade Spanish**

At this level students are very familiar with the sounds of the Spanish language. They have conducted extensive cultural explorations and have a working understanding of the spoken and written language. They are able to have conversations in Spanish on several subjects and can write short essays. Classes reinforce what they have already learned in order to build confidence. Spanish is used more often for communication, and students round out this year of Spanish with a solid understanding of the present tense, the simple future, and informal and formal commands.

The curriculum provides a foundation in the 5 C's of the National Standards for foreign language instruction:

- Communication in the target language
- Connections with other disciplines
- Comparisons that develop insight into the nature of language and culture
- Cultural experiences
- Communities – students learn how to communicate in a multilingual community

Eighth graders receive formal language training and explore Spanish-speaking cultures and countries through the use of multi-media. Their level of understanding is such that they can pick out meanings in conversations with native speakers, work through a news article and understand the information with some help from a dictionary. This group finishes the *¡Exprésate! Level 1* textbook and reads articles from the Spanish magazine *Think Spanish!*

### **7<sup>th</sup> and 8<sup>th</sup> Grade Visual Art**

Art is a process that requires the combination of learned skills, and the ability for creative thought to express a given concept. The more one hones one's technical skills, the more effective one is in conveying emotion through artwork. The means by which the creative mind is utilized and problem-solving processes are developed allow for deeper and more meaningful communication through the visual arts.

Visual art is a vital element in the development of the academic and creative mind at the middle school level. The artistic process is focused upon in a greater capacity than the creation of finished products. Students will participate in discussion based around the cultural relevance and impact of art in history to the present day. Discussion will also facilitate the formulation of personal preference and opinion in relation to appreciation and historical study, as well as allowing for development of the “art dialect.” The basic elements and principles of design provide the foundation for building confidence in the processes and skill sets in art production of various two and three-dimensional materials.

The first units will be based around drawing skills as the foundation for all visual expression. Students will participate in life drawing lessons as well as more creative, open-ended uses of the various drawing media. Painting is the second major unit, allowing students opportunities to develop color theory, mixing and application techniques, and compositional decision-making. Students are then directed into several three-dimensional sculpture projects dealing with ceramic hand-building, wheel throwing, and plaster-based materials. Other media explored include printmaking, fabric dying, and the commercial arts. Sketchbook homework assignments will be used as technical skill practice, idea generation, and preparation for class projects. Students will compile work in personal portfolios and participate in several peer and formal critique processes. By the end of this course, students will have experience in several technical aspects of two and three-dimensional work enabling realistic representation and creative expression. Continuing to create interest and excitement around the visual arts is a major focus of the middle school program.

### **7<sup>th</sup> and 8<sup>th</sup> Grade Music**

Taking advantage of the Rock and Roll Academy studio space, the students have the chance to play all the instruments and carve out their own creative space. A “learn by doing” approach encourages students to share their knowledge with each other, completing the essential loop of true understanding. We continue our cultural and historical approach to learning American music, coming to recognize major contributors and significant stylistic periods. We then bring this understanding, feel and technique for the music into performance and feel the power and creative joy of making and sharing this music. Students commonly perform various musical selections on a variety of instruments gaining invaluable musical experience as well as experiencing the teamwork required to succeed in a performance ensemble.

### **7<sup>th</sup> and 8<sup>th</sup> Grade Physical Education**

The goal of the seventh and eighth grade physical education program is to provide students with physically enhancing and rewarding experiences outdoors that contribute to a lifetime of healthy and active endeavors. Students focus on building general fitness and coordination to improve athleticism. Sound work ethic and sportsmanship is expected and graded. Seventh and eighth graders play sports such as soccer, ultimate frisbee/frisbee golf, dodgeball, and track with a shift in emphasis to the physical training aspects of becoming successful athletes. Students use the skills and concepts of heart rate monitoring, student-led yoga and stretching, breathing, warm-up and cool-down and

endurance to encourage the synthesis of mind and body. Students train for winter sports through agility and strength exercises. Classes take place on the Lawson Hill field throughout the school year and in classrooms when weather dictates. Like all disciplines at the Telluride Mountain School, students are expected to uphold the core values of responsibility, respect, integrity, and love of learning.