



P A R K C I T Y  
D A Y S C H O O L

## 9<sup>th</sup> Grade Curriculum

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### **Middle School Divisional Overview**

On the Pinebrook campus, the Park City Day School Middle School Program (grades 6-9) promotes the intellectual, social, physical and ethical development of early adolescents. In a respectful environment sensitive to the dramatic changes taking place within their worlds, Park City Day School students develop leadership skills and learn to make responsible choices, academically and socially, that help to shape them into the positive adults they will become. Our experienced Middle School educators mentor as well as teach, and through frequent personal interaction and an advisory program, they encourage students to navigate the challenges of adolescence in healthy and positive ways.

The Middle School Program offers a challenging curriculum that is a solid preparation for academic success in high school and beyond. Students develop the knowledge and skills necessary for that success through dynamic course work involving hands-on, experiential learning and integrated technology. The curriculum and the intellectual model displayed by exceptional teachers foster in our students a habit for lifelong learning. Opportunities to grow as individuals via participation in performing and visual arts, outdoor education, service learning and other areas abound, and peer groups are supportive and encouraging of that developing individuality.



## **Subject Descriptions:**

### ***Mathematics***

Mathematics competency is an essential component of PCDS's well-rounded academic program. Building upon the foundation of strong computation skills established in the Lower School, MS students at PCDS have an opportunity, when appropriate, to study at a higher degree of abstraction and at a more advanced pace. Regardless of placement, the focus of the MS math program is to develop strong analytical and problem solving skills through the application of mathematics in an authentic learning environment.

### ***Science***

The MS Science Program at PCDS provides an inquiry-based, student-centered program that promotes critical thinking and analysis of natural phenomena. In a research based curriculum and grounded in National Science Standards, students explore topics through their own investigations employing the scientific method, reflect on their observations, and apply what they have learned to real life situations through the physical, earth, and life sciences.

### ***English and Social Studies***

In a world of ever increasing connectivity, the interdisciplinary approach of the PCDS MS Humanities program brings History, Geography, Language Arts, and the visual and performing arts together into a comprehensive and meaningful explorative course of study. Students consider an array of topics, including literature, linguistics, history, philosophy, and ethics, applying humanities to the human environment. At PCDS the humanities and arts teachers work together to provide students a rich understanding of the diverse traditions and cultural history of our world.

### ***Foreign Language***

The MS foreign language program at PCDS employs Spanish as the primary language of instruction. As students work towards language fluency in both conversation and written expression, MS students hone vocabulary knowledge and nascent language skills developed in the Lower School language program. The language mechanics of advanced verb tense, advanced pronouns, and reading comprehension are essential aspects of the MS program. In addition to Spanish, MS students have an opportunity to explore Japanese beginning in the sixth grade.

### ***Physical Education***

The development of a strong, healthy body is essential to the building of a strong, healthy mind. At PCDS MS students develop body awareness through a variety of traditional and non-traditional physical activities. Students build self confidence through a team-building approach centered upon whole body development of fine and gross motor skills, as well as through participation in school-wide and in-class performances.

### ***Performing Arts***

Exploring many facets of the performing arts world, the PCDS MS Performing Arts program engages students as they build confidence and poise developing their skills as performers. Students study an eclectic mix of classical and contemporary musical cultures, prepare assigned and individually selected repertoires for concerts and programs, and immerse themselves in art through performing. PCDS MS students also study and play a musical instrument each trimester and may select additional courses through the electives program.

### ***Visual Arts***

In MS, students continue studies of the elements of art and principles of design at a more advanced level. Projects are designed to be fun, engaging, and interesting, and students are encouraged to incorporate creative inspirations and modern materials into their work. MS students use their art to communicate and represent personal ideas, interests, and feelings. Art as expression is an essential concept for this age group and therefore in the final trimester each year students have the opportunity to design their own project around a theme and in the media of their choice.



### **Socio-Emotional Development at PCDS**

Bridging the gap between elementary and secondary education, the Park City Day School MS program establishes the cornerstone of a solid academic foundation within an experiential, student-centered atmosphere. Reflected throughout the MS program is the seminal belief that students learn best in a respectful environment that ignites curiosity, builds confidence, engages communication skills, and teaches organizational habits.

In addition to the focus on academic subjects, students at PCDS participate in service learning projects, international language immersion trips, and experiential learning activities. Students serve as mentors and demonstrate leadership skills through organizing events for the community.

### **Technology & 21st Century Learning:**

The Park City Day School MS embraces a one-to-one laptop learning environment that offers students an intellectually active means to develop the skill sets essential to be productive participants in an ever-changing world. Woven throughout the core program are the 21st Century learning themes of global awareness, group process, technological literacy, and communication literacy. Through an array of digital media, students regularly employ various Internet sources and program applications to demonstrate these competencies in core subjects.

### **Program Outline:**

*Although most Park City Day School MS students will follow the academic sequence outlined below, teachers may modify schedules and placements when necessary to meet individual student needs.*

#### **Sixth Grade:**

English 6  
Social Studies 6  
Science 6  
Mathematics 6 or Pre-Algebra 6  
Physical Education  
Spanish 6  
MS Strings Ensemble (1 trimester required)  
Ethics  
Outdoor Education  
Elective Course options

#### **Seventh Grade:**

English 7  
Social Studies 7  
Science 7  
Pre-Algebra 7 or Algebra I  
Physical Education  
Spanish 7  
Ethics  
Outdoor Education  
MS Strings Ensemble (1 trimester required)  
Elective Course options

#### **Eighth Grade:**

English 8  
Social Studies 8  
Science 8  
Algebra I or Geometry  
Physical Education  
Spanish 8  
Ethics  
Outdoor Education  
MS Strings Ensemble (1 trimester required)  
Elective Course options

#### **Ninth Grade:**

English 9  
History 9  
Geometry or Algebra II  
Science 9  
Physical Education – Fit for Life  
Spanish 9  
Ethics  
Outdoor Education  
MS Strings Ensemble  
Elective Course options



## Middle School Academic Technology

### *Middle School Laptop Program*

The pinnacle of the PCDS technology program is the Middle School laptop program. Utilizing a personal laptop computer, students engage in authentic learning situations as they produce work in a variety of technological media. With access to the Internet, students reach beyond the walls of the classroom to discover primary documents, current events, engage in real time and asynchronous conversations with classmates, teachers, and when appropriate experts in various fields or classrooms around the globe.

### **Skills**

#### ***Creativity and Innovation***

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- Apply existing knowledge to generate new ideas, products, or processes.
- Create original works as a means of personal or group expression.
- Use models and simulations to explore complex systems and issues.
- Identify trends and forecast possibilities.

#### ***Communication and Collaboration***

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others. Students:

- Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media.
- Communicate information and ideas effectively to multiple audiences using a variety of media and formats.
- Develop cultural understanding and global awareness by engaging with learners of other cultures.
- Contribute to project teams to produce original works or solve problems.

#### ***Research and Information Fluency***

Students apply digital tools to gather, evaluate, and use information. Students:

- Plan strategies to guide inquiry.
- Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
- Evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
- Process data and report results.

#### ***Critical Thinking, Problem Solving, and Decision Making***

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. Students:

- Identify and define authentic problems and significant questions for investigation.
- Plan and manage activities to develop a solution or complete a project.
- Collect and analyze data to identify solutions and/or make informed decisions.
- Use multiple processes and diverse perspectives to explore alternative solutions.

#### ***Digital Citizenship***

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

- Advocate and practice safe, legal, and responsible use of information and technology.
- Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- Demonstrate personal responsibility for lifelong learning.
- Exhibit leadership for digital citizenship.

#### ***Technology Operations and Concepts***

Students demonstrate a sound understanding of technology concepts, systems, and operations. Students:

- Understand and use technology systems.
- Select and use applications effectively and productively.
- Troubleshoot systems and applications.
- Transfer current knowledge to learning of new technologies.

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### **Suggested Learning Activities**

- Digital storytelling
- Blogs and wikis
- Video production
- Online labs and forums
- ePortfolios

- Video conferences
- Digital art/photo manipulation

### **Assessment**

- Formative
- Summative
- Rubric based



## 9<sup>th</sup> Grade English

### Content

Writing, spelling, and grammar  
Public speaking and speech writing  
MLA formatting  
Journal writing/reader response  
Journalism  
Elements of poetry  
Poetry analysis  
Literary elements  
Reading/comprehension  
Drama  
Vocabulary  
Technology  
Film and analysis

Research  
Portfolios  
Elements of plot  
Creative projects  
Six Traits of Writing  
Cross-curricular connections  
Information access  
Cooperative learning  
Reflective/critical thinking  
Effective communication  
Debate  
Socratic seminar  
Rhetoric

As the Ninth grade English course seeks to integrate with Social Studies, the following topics will be approached from a literary perspective: human geography including population, migration, folk and Pop Culture, language, religion, ethnicity, politics, agriculture, industry, urban patterns, etc. Focus will be on “sense of place”.

### Essential Questions

How does a literary work relate to other texts relevant to its historical/geographical setting?  
How does culture influence literature and how does literature influence culture?  
How does literature reveal the values of a given culture or time period?  
Are there universal themes in literature that are of interest or concern to all cultures and societies?  
What is “sense of place”?  
How does a literary work represent “sense of place”?  
How is literature a reflection of the human experience?  
How do we connect our human experience to literature?  
How do we articulate our human experience through written expression?  
How does our geographic location and culture affect story?  
What is Socratic Method?

### Skills

The student will be able to:

- Demonstrate the writing process including:
  - Refining strong thesis statement
  - Persuasive and expository essay
  - Creative writing
  - MLA formatting
- Practice public speaking and rhetoric
- Practice reflective thinking through:
  - Journal writing/reader responses
  - Discussion
  - Essay writing
- Develop method of inquiry including:
  - Developing essential questions
  - Socratic Method of discussion
  - Making connections to self, the past, and the present
- Practice and apply journalism methods including:
  - Fact finding
  - Reporting
- Identify and apply elements of poetry/sound devices
- Identify poetry genres

Six Traits of Writing Model  
Journal writing/reader responses  
Research papers  
Speeches



- Identify and apply literary elements
- Exercise Reading Comprehension including:
  - Summarizing
  - Finding facts and main points
  - Interpreting
  - Predicting
  - Making inferences
  - Making connections
  - Drawing conclusions
- Spell correctly and apply vocabulary words from the literature
- Identify elements of Shakespearean drama
- Practice and apply technology skills
- Practice viewing skills and analyze material
- Practice effective and active listening skills
- Practice speaking skills including: discussion, speeches, drama, debate
- Practice and apply research skills
- Complete and maintain portfolios
- Practice and apply note-taking skills: annotating and underlining text and during lecture and discussion
- Practice and apply higher order thinking skills: before, during, and after reading; while disseminating information, during discussion, while listening and in writing
- Complete creative projects
- Identify and apply cross-curricular connections
- Practice cooperative learning
- Practice reflective thinking including:
  - Journal writing
  - Reading responses
  - Discussion
  - Essay writing
  - Making connections to self, world, and history
- Practice effective communication including: written and oral, debate, Socratic seminar and speech delivery

Visualizing  
Author's intention/audience  
Evaluating/assessing  
Discovering common themes  
Formulating literal, interpretive, and universal questions

## Assessment

- Reading: oral and silent
- Reading/studying/performing Shakespeare
- Discussion of the books/poetry
- Homework assignments
- Teacher observation
- Written persuasive and expository essays
- Self and peer editing
- Involvement in group/paired discussions and activities
- Self, peer, and teacher evaluation of written work
- Research
- Written and oral research presentations
- Literary response/journal writing
- Debate outcomes
- Spelling and vocabulary work
- Ability to apply MLA format
- Poetry portfolio
- Quizzes, tests, and projects
- Poetry analysis
- Written summaries
- Literature circles
- Layered curriculum projects
- Inquiry-based projects

## Textbooks/Resources

*Write Source*

Six Traits of Writing Model

Novels include a wide variety of modern classics by authors including Sinclair, Cather, Steinbeck, and Faulkner

Poetry and speeches from famous figures such as Thoreau, Emerson, and Kipling

Short stories, plays and films from a selection of authors such as Rose, Lawrence and Shakespeare

Multi-media sources



## 9<sup>th</sup> Grade Mathematics (Algebra 2)

### Content

Number sense and operations

Algebra

Geometry

Measurement

Statistics, data analysis and probability

Problem solving

Reasoning and proof

Connections

Communication

Representation

### Skills

The student will be able to:

#### *Number Sense and Operations*

- Classify numbers based of the properties of real numbers
- Perform operations with complex numbers

#### *Algebra*

- Simplify algebraic expressions
- Solve equations and inequalities
- Identify relations and functions
- Graph linear equations and write direct variation equations
- Perform vertical and horizontal translations
- Solve and graph two-variable inequalities
- Solve systems of equations or inequalities algebraically and by graphing
- Solve problems with linear programming
- Create and read graphs in three dimensions
- Solve and graph systems with three variables
- Explain the properties of parabolas
- Translate parabolas
- Factor quadratic expressions and solve quadratic equations
- Complete the square
- Solve polynomial functions
- Divide polynomials
- Find the roots of radical expressions
- Multiply and divide radical expressions
- Evaluate expressions with rational exponents
- Solve radical equations
- Perform operations with functions
- Find the inverse of a relation or function
- Graph radical functions
- Describe the properties of exponential functions and logarithms
- Solve exponential and logarithmic equations

- Use inverse variation
- Graph rational functions
- Evaluate rational expressions and solve rational equations
- Use radian measure for angles
- Solve sine, cosine, and tangent functions
- Evaluate reciprocal trigonometric functions
- Solve trigonometric equations using inverses

#### *Geometry*

- Explore and translate conic sections
- Work with parabolas, circles, ellipses, and hyperbolas
- Use arithmetic and geometric sequences and series
- Find the area under a curve
- Verify and use angle, double-angle, and half-angle identities

#### *Statistics, Data Analysis and Probability*

- Organize data into matrices
- Calculate the probability of multiple events and conditional probability
- Calculate standard deviation
- Use binomial and normal distributions

#### *Problem Solving*

- Use linear models to describe real life events
- Use exponential models to solve problems

#### *Reasoning and Proof*

- Derive the Quadratic Formula
- Explain theorems about roots of polynomial equations
- Describe the Fundamental Theorem of Algebra and the Binomial Theorem
- Solve problems using the Law of Sines and the Law of Cosines

### Assessment

- Daily homework assignments
- Mid-chapter quizzes
- End of chapter tests
- Informal assessments in class

### Textbooks/Resources

Prentice Hall, 2009, *Algebra 2*



## 9<sup>th</sup> Grade Science (Biology)

### Content

The process of scientific inquiry  
Origins of biological diversity  
Life science and our changing world  
The architecture of life

### Essential Questions

What are scientific theories and what role do they play in biology?  
What is involved in the genetic reproduction of a cell and the whole organism?  
How do mechanisms of molecular biology and natural selection help to explain evolution?  
What role does energy play in an ecosystem?

### Content Knowledge

The student will be able to:

#### *The process of scientific inquiry*

- Synthesize and apply the process of scientific inquiry
- Explain the nature of scientific inquiry
- Understand biology as both discovery science and hypothesis-based science

#### *Origins of biological diversity*

- Understand and explain the processes of inheritance, development and growth
- Understand and explain evolutionary biology
- Understand and explain speciation and organic diversity

#### *Life science and our changing world*

- Understand and describe the characteristics of behavioral science
- Understand and describe the characteristics of ecological science

#### *The architecture of life*

- Explain and describe plant structure and function
- Explain and describe animal structure and function

### Process and Inquiry Skills

The student will be able to:

- Make inferences based upon scientific inquiry
- Apply the scientific method
- Model processes or events
- Classify information, data, objects or events
- Apply the uses of scientific tools and resources to the research process
- Exercise scientific habits of mind

### Assessment

- Journals
- Daily participation
- Lab reports
- Quizzes/tests
- Student reflections

### Textbooks/Resources

*Exploring Life*, Prentice Hall



## 9<sup>th</sup> Grade Human Geography

### Content

Geographic tools and resources

Population and demographics

Cultural geography

Political geography

Economic development and services

Urban growth and development

Resource conservation

Integrating and correlating content with the English program, the Grade 9 Social Studies program reinforces a variety of literary and writing elements.

### Skills

The student will be able to:

#### *Geographic tools and resources*

- Recognize, identify and apply appropriate resources
- Utilize a variety of map types to make connections, distinctions, and identify characteristics of a place
- Understand the patterns and characteristics of major landforms, climates, and ecosystems of Earth and the interrelated processes that produce them
- Understand the concept of region as an area of Earth's surface with unifying geographic characteristics
- Describe the physical environment of regions and the physical processes that affect these regions such as weather, tectonic forces, wave action, and soil building processes

#### *Population and demographics*

- Understand the types and patterns of settlement, the factors that affect where people settle, and processes that affect the development of settlements over time
- Understand the growth, distribution, movement, and characteristics of world population
- Understand how people, places, and environments are connected and interdependent

#### *Cultural geography*

- Analyze the effects of physical and human geographic patterns and processes on events in the past and describe their effects on present
- Understand how the components of culture affect the way people live, shape the characteristics of regions, and influence the ways in which cultures change or maintain continuity
- Understand the cultural and regional influence of religion

#### *Political geography*

- Understand the characteristics of a variety of political organizations

#### *Economic development and services*

- Understand the distribution and characteristics of economic systems throughout the world
- Understand how different points of view influence the development of public policies



*Urban growth and development*

- Identify types of services in various locations, settings, and time frames
- Understand the evolution of industrial growth
- Understand the positive and negative impact of growth and development to a region economically, environmentally, and culturally
- Identify and use demographic models

*Resource conservation*

- Identify and understand a variety of issues related to resource use and conservation of resources to support sustainability

**Assessment**

- Chapter Questions, Daily Warm-up Activities
- Vocabulary Quizzes/Chapter Tests/Map Quizzes
- Research Papers
- Class Projects (Brochures, Collages, Timelines, etc.)

**Textbooks/Resources**

*An Introduction to Human Geography: The Cultural Landscape* - Eighth Edition (James M. Rubenstein)



## 9<sup>th</sup> Grade Spanish

### Content

Vocabulary  
Grammar  
Oral reading and expression  
Writing/translation  
Comprehension/language usage

### Skills

The student will be able to:

#### Vocabulary

- Apply previously acquired vocabulary
- Utilize resources to determine appropriate word choice
- Identify and apply descriptive language
- Select most appropriate word to a given situation

#### Grammar

- Apply previously acquired knowledge of grammar structure and conjugation
- Apply correct verb tense and subject agreement to a variety of commonly used regular and irregular verbs
- Identify direct and indirect object pronouns
- Identify definite and indefinite articles and gender of nouns
- Identify and apply reflexive verbs
- Conjugate past and future verb tense
- Apply the concepts of singular and plural
- Apply progressive present tense to on-going activities
- Understand and apply the parts of speech and basic grammar including:
  - Prepositional phrases
  - Comparative words
  - Affirmative commands
  - Interrogative words

#### Oral reading and expression

- Express common greetings, descriptions, and calendar information in conversational scripts
- Express language in appropriate paragraph format
- Express dialogues, stories, and instructions in Spanish
- Read selections from native materials such as newspapers and magazines
- Read and express ideas or thoughts in Spanish
- Converse in Spanish

#### Writing/translation

- Apply essential writing skills such as brainstorming, rough draft, and revisions
- Respond appropriately using complete sentences and grammar structure
- Compose conversational pieces
- Use various verbs correctly in a piece of writing
- Use direct and indirect object pronouns together in a sentence
- Translate selections from a wide variety of sources from Spanish to English and vice versa

#### Comprehension/language usage

- Respond appropriately to greetings, questions, and conversation

### Assessment

- Quizzes and tests
- Student presentations and cooperative learning activities
- Written assessments
- Oral assessments

- Teacher observations and anecdotal notes

### Textbooks/Resources

*Practice Makes Perfect* and *Exprésate*



## 9<sup>th</sup> Grade Visual Art

### Content

Independent study in medium of student's choice, based upon weekly appointments with art teacher

### Skills

The student will be able to:

- Select theme/topic of importance
- Effectively design a series of art projects based on selected theme/topic
- Design presentation to introduce project to class
- Participate in class discussion, critique, and feedback of ideas and impressions
- Create a schedule within a designated time frame
- Maintain self-structured work time
- Maintain materials
- Self-critique to monitor progress
- Write an artist statement to effectively support art project
- Understand how of location, placement, and lighting influence presentation

### Assessment

- Informal observation
- Weekly student/teacher appointments and conversation assessing art work in progress
- Physical portfolio containing all student work from one year
- Digital portfolio containing collection of student work from all previous grade levels
- Informal sketchbook assignments
- Informal written reflection
- Written assignments
- Rubric
- Contribution and participation in class discussion
- Formal project presentation to an audience
- Formal ending critique with teachers of student choice
- Participation in school art shows and exhibitions



## 8<sup>th</sup> and 9<sup>th</sup> Grade Performing Arts

### Content

The elements of music theory and application to include: history, rhythm, melody, harmony, form, timbre, tone and performance

### Skills

The student will be able to:

- Apply knowledge learned in earlier grades including:
  - The orchestra and families of instruments
  - Review vocal ranges: soprano, mezzo-soprano, alto, tenor, baritone, and bass
- Recognize frequently used Italian musical terms
- Recognize the introduction interlude and coda in musical selections
- Recognize theme and variations
- Identify chords such as I (tonic), IV (subdominant), and V (dominant)
- Identify major and minor chords
- Understand and recognize intervals
- Understand an octave step
- Understand the following notation: names and lines of spaces in the treble clef; middle C. treble clef, staff, bar line, double bar line, measure, repeat signs, Da Capo al fine, quarter note, half note, dotted half note, whole note, eighth note, quarter rest, half rest, and whole rest.
- Identify tied notes and dotted notes
- Meter signature 4/4, 2/4, 3/4
- Listen and aurally analyze a select repertoire of classical to contemporary composers
- Listen to Blues, Jazz, Ragtime, and Spiritual; understand their historical context
- Sing a select repertoire of music
- Analyze a select repertoire of Classical, Romantic, and Contemporary music
- Identify composers and music time periods throughout history
- Understand and correctly spell musical terminology
- Perform during class solos and ensemble work
- Perform voice/dance/drama in annual performances
- Express oneself in front of peers and before an audience
- Memorize music and parts for class and performances
- Understand the fundamentals of piano hand positions
- Understand how to read and locate notes on the piano
- Read and play songs in correct meter and tempo
- Prepare several songs, within reading ability, for weekly classes and trimester recital

### Assessment

- Performances in-class and in public
- Solo and ensemble singing
- Written quizzes, tests and other assignments
- Aural recognition of selected repertoire



## 6<sup>th</sup> – 9<sup>th</sup> Grade String Ensemble

### Content

Music Theory  
Technique  
Bowing techniques  
Hand position  
Tone quality and production  
Pitch accuracy  
Musicianship  
Vibrato

### Skills

The student will be able to:

- Identify the parts of the violin, viola, cello, or bass violin
- Recognize notes, key signatures, scales, harmony, and musical staff
- Play as an individual and in an ensemble
- Understand the historical background of stringed instruments
- Apply listening skills
- Apply correct posture

### Assessment

- Mastery of skills/passages
- Group work
- Participation
- Preparation
- Theory assignments
- Performance – in class and in recital

### Texts/Resources

*Strictly Strings; All for Strings; Essential Elements for Strings; Strings Extraordinaire, Miscellaneous Sheet Music; All for Strings Theory Workbook;* Additional repertoire will be implemented as the term progresses and playing abilities are determined.



## 6<sup>th</sup> – 9<sup>th</sup> Grade Physical Education

### Content

Bodyweight exercises  
Flexibility and increased agility training  
Ultimate Frisbee  
Presidential Physical Fitness Test  
Football, team handball, basketball, soccer, volleyball  
Tennis, golf, Frisbee golf  
Baseball skills, triathlon skills, advanced obstacle courses  
Introduction to weight lifting  
Creative movement  
Circus arts  
Cooperative challenges  
Stretching with partners  
Cross country skiing  
Sportsmanship  
Hiking, snowshoeing  
Mountain biking  
Cooperative challenges  
First Aid

### Skills

The student will be able to:

- Perform group stunts safely
- Juggle
- Throw and kick for combined speed, accuracy and power
- Strike
- Catch a moving target while on the run
- Demonstrate track and field skills: hammer throw, high jump long jump, etc.
- Participate in fitness activities with weights
- Appreciate and demonstrate teamwork
- Understand rules and participate in soccer, basketball, handball, volleyball, batting, and football
- Calculate heart rate
- Demonstrate extended running
- Participate in group problem solving
- Participate in extended single-track mountain bike rides

### Assessment

- Creative movement performance
- Adherence to the rules in a team sport
- Maintaining moderate activity level for at least 35 minutes
- Running 1 ½ miles without stopping
- Demonstrating proper push-ups, pull-ups and sit-ups
- Identifying health related components of physical fitness
- Identifying proper First Aid procedures
- Demonstrates ability to take appropriate risks
- Demonstrates perseverance
- Demonstrates pleasure in physical engagement
- Applies understanding of health considerations during exercise: hydration, heart rate, etc.



## 6<sup>th</sup> – 9<sup>th</sup> Grade Outdoor Education

### Content

Camping/hiking  
Mountain/road biking  
Rock climbing  
Ski mountaineering, snowshoeing, snow science  
Nordic skiing, alpine skiing  
Emergency skills  
Outdoor character development

Health and human performance  
Leadership/cooperative challenges  
Environmental awareness, conservation and sustainability  
Natural science  
Reflection and personal introspection

### Skills

The student will be able to:

- Set up tents
- Practice trail cooking and cleanup with limited supervision
- Prepare and pack for short and extended trips
- Prepare and pack for weather and the elements
- Display proper etiquette for biking trails and road trails
- Begin riding on advanced off-road mountain biking trails
- Identify parts of the bicycle and understand basic mechanics and maintenance
- Change a bicycle tire
- Use rock-climbing equipment safely and independently
- Understand winter weather conditions; considerations and safety; avalanche and snow science
- Use basic backcountry ski touring equipment
- Demonstrate endurance on intermediate and advanced cross-country and alpine skiing trails
- Display cross-country ski trail etiquette
- Recognize different emergencies and respond appropriately
- Practice Wilderness First Aid / Basic CPR
- Understand basics of survival in adverse circumstances
- Challenge one's physical and mental comfort level
- Develop and display (age appropriate) self-motivation and self-reliance
- Identify one's own optimal heart rate and work toward a target range
- Set personal goals for physical and mental strength and endurance
- Understand basics of resistance (anaerobic), endurance (aerobic), sports specific training, and influence of nutrition on health and performance
- Apply knowledge of anatomy/physiology, biomechanics, and musculature/skeletal systems as it relates to the body and the activity
- Apply scientific knowledge to understanding natural phenomena
- Read and respond intelligently to writing on nature
- Identify and know flora and fauna
- Conserve resources and practice sustainable camping/hiking/recreation practices

### Textbooks/Resources

Local state parks, Sierra Nevada, Chaco Canyon, Utah science core curriculum, local mountain trails, *Deep Survival* by Laurence Gonzales, NSCA Training, Wasatch backcountry, Uinta National Forest