



Middle School Curriculum Guide



The Cascades Academy Middle School Program is designed to provide both the intellectual and emotional support adolescents need to help them navigate a successful transition from the self-contained classrooms of elementary school to the even more dynamic and demanding middle school environment. By providing an intimate and inspired learning environment that encourages participation, accountability and cooperation, the middle school course-of-study serves as a ladder-to-success that strives to prepare students for the challenges of high school and to develop life-long learners who are critical and independent thinkers who engage positively in their community.

In this guide you will find descriptions for academic classes as well as explanations of other Middle School programs, such as the Arts, Music, Technology, Confluence, Advisory, Outdoor Education, Community Service, and Traveling School - all programs that specifically support our goals for the Middle School Program as well as the mission of our larger community.

Academics

English & Language Arts / Becca Schroeder

Sixth Grade / Theme: Who Am I?

Sixth grade is an exciting time for students as they transition out of lower school to the beginning of middle school. During this transition, students become more independent and make choices for themselves as they explore their personal identity. The English classroom will reflect the learning that comes with independence and focus on a central theme of Who Am I?. The course will contain short stories, novels, and writing projects related to this theme. There will be an integration of grammar, spelling, vocabulary, and reading skills in each unit as well as an interdisciplinary connection to the social studies course.

Seventh Grade / Theme: Adversity, Conflict, and Change

Seventh grade is a time for growth in the middle school as students continue to establish their personal identity while exploring their role in the larger world. During this time, students question the way things are in the world and feel empowered to make changes. The English classroom will reflect the passion that middle school students have for making a difference and focus on a central theme of Adversity, Conflict, and Change. The course will contain short stories, novels, and writing projects related to this theme. There will be an integration of grammar, spelling, vocabulary, and reading skills in each unit as well as an interdisciplinary connection to the social studies course.

Eighth Grade / Theme: Social Justice

Eighth grade is an important year for students to explore their personal beliefs. Students are influenced by a number of outside factors. Literature and class discussion serve as an outlet for addressing those factors while helping students establish a sense of personal responsibility, especially in making decisions. The English course will reflect this important year of adolescence and focus on a central theme of Social Justice. The course will contain short stories, novels, and writing projects related to this theme. There will be an integration of grammar, spelling, vocabulary, and reading skills in each unit as well as an interdisciplinary connection to the social studies course.

Mathematics / Sarah Nichols and Becca Schroeder

6th Grade / Concepts and Applications

This mathematics course is designed to be a bridge from elementary mathematics to more complex and abstract reasoning through the use of problem solving strategies, recognition of patterns, and application of mathematical principles. Students will become more fluent with numbers in various forms, such as fractions, decimals, and percents. Over the course of the year, they will also develop a stronger sense of the relationships between numbers and how those relationships can be used to describe and solve problems. The concepts will be presented and explored through a combination of class examples, individual practice problems, small group oriented problem solving tasks, and projects. The projects will often be interdisciplinary, allowing students to make connections between the math they are learning and other aspects of their lives. In addition to finding fluency within specific content areas, students will also be encouraged to communicate mathematical concepts in a clear and sophisticated manner.

7th Grade / Path A / Pre Algebra

This pre-algebra course is designed to build on the basics of applications of math and facilitate the transition of students' thinking from concrete processes to more abstract problem solving. The aim of this course is to reinforce students ability to manipulate numbers and develop comfort with the idea of equations as relationships. Students will quickly recognize and use symbols as a representation of numbers. The concepts will be presented and explored through a combination of class examples, individual practice problems, small group oriented problem solving tasks, and projects. The projects will often be interdisciplinary, allowing students to make connections between the math they are learning and other aspects of their lives. In addition to finding fluency within specific content areas, students will also begin to communicate mathematical concepts in a clear and sophisticated manner.

7th Grade / Path B / Algebra 1

This algebra course is designed to build on the basics of abstract math introduced in middle school. Algebra allows a students to explore patterns and relationships and to express them in mathematical terms. In this class, students will analyze these mathematical relationships and changes within them using symbols, functions, and graphical modeling. The concepts will be presented and explored through a combination of class examples, individual practice problems, small group oriented problem solving tasks, and projects. The projects will often be interdisciplinary, allowing students to make connections between the math they are learning and other aspects of their lives. In addition to finding fluency within specific content areas, students will also be expected to communicate mathematical concepts in a clear and sophisticated manner.

8th Grade / Path A / Algebra I

This algebra course is designed to build on the basics of abstract math introduced in middle school. Algebra allows a students to explore patterns and relationships and to express them in mathematical terms. In this class, students will analyze these mathematical relationships and changes within them using symbols, functions, and graphical modeling. The concepts will be presented and explored through a combination of class examples, individual practice problems, small group oriented problem solving tasks, and projects. The projects will often be interdisciplinary, allowing students to make connections between the math they are learning and other aspects of their lives. In addition to finding fluency within specific content areas, students will also be expected to communicate mathematical concepts in a clear and sophisticated manner.

8th Grade / Path B / High School Mathematics (Geometry/Algebra II)

Algebra II

Algebra II is an advanced course of study of algebraic expressions and functions. Students investigate the methods involved in evaluating complicated systems of equations including linear, quadratic, exponential, inverse, radical, and logarithmic functions. Basic trigonometry, polynomials, and conics – especially as they relate to graphing and data representation – are also covered. This course serves to deepen and extend students' understanding of algebra and prepare them for Pre-Calculus. This class rotates yearly with Geometry.

Geometry

Euclidean Geometry is the study of graphical representations of data. This course challenges students to expand their deductive and inductive reasoning skills as they learn the foundations of modern mathematics as they have developed since Greek culture and even earlier. With an emphasis on the construction of logical proofs of theorems, problem-solving using coordinate systems, and real-life applications of plane and dimensional geometry, the class presents new approaches to understanding even those concepts that have come in earlier math courses. Students also develop skills useful in drawing and measurement, and these translate to real-world applications such as architecture, drafting, graphic design, mechanical design, and more. The concepts learned in this course also serve as foundational elements for Pre-Calculus. This class rotates yearly with Algebra II.

Science / Dr. Anne-Marie Eklund

Year One / 6th Grade / Earth Science

This Earth Science class covers the sciences of geology, meteorology, and oceanography. In geology, we take advantage of the amazing geological history of Oregon and learn how rocks, rivers and mountains are formed, by viewing our immediate surroundings. Earthquakes, volcanoes and mountain building are also studied in the context of our spring traveling school activities. In the winter trimester, we will focus on weather and climate, and in the spring we will explore physical, chemical and biological limnology and oceanography, along with environmental science. The course will emphasize inquiry-based research and laboratory activities, independent projects and the use of a field journal.

Year Two / 7th Grade / Physical Science

This class includes a study of astronomy, physics, and chemistry and seeks to explain the properties of matter and energy and how they interact. We begin the year with astronomy and take advantage of our proximity to the Pine Mountain Observatory to really experience professional-level star viewing. Local astronomers share their expertise with us in the classroom and at the observatory. Much of the year is focused on energy: understanding the basic laws of physics and using that knowledge to understand and explore energy in our everyday lives. We discuss alternate energy sources, climate change and environmental chemistry. We are able to spend some time exploring each type of energy source, what it means, how it works and how it applies to current events. An overall goal for the year includes learning the basics of physics and astronomy in order to understand more about the natural laws governing our universe. Equally important goals include using the scientific method of inquiry and experimentation, and learning to enjoy scientific discovery. Classroom activities are augmented with field trips, laboratory investigations and the use of a laboratory/field notebook.

Year Three / 8th Grade / Life Science

This science course is one of exploration, appreciation and understanding of life processes. We study ecology, evolution, plant biology, zoology, cell biology, genetics and human anatomy and health. The focus of study in the fall and spring includes many opportunities to incorporate field work and observations of nature. In the winter trimester, the focus is on cell biology and human physiology and health. Overall goals of the course are for the students to enhance their abilities to notice the life forms in their environment, to identify them as specific organisms and to understand their relationships with the other organisms in the ecosystem. In addition, students will be expected to solve problems using the scientific method, with a focus on inquiry-based research projects and outdoor observations.

History / Social Sciences / Tim Green

Year One / Ancient World History and Social Sciences

Students in Year One of the History and Social Studies series explore a historical chronology beginning with the Paleolithic period and progressing up to the Middle Ages. Students are introduced to various historical themes, such as power and authority, revolution, exchange, cultural interaction, economics, and exploration to gain perspective on these early historical periods and to identify what these ancient cultures offered to the contemporary world. Students also examine how historical patterns relate to the five themes of geography (location, place, movement, region, and human-environmental interaction). Students are also introduced to a wide variety of historical thinking skills, from distinguishing between past, present, and future time to comparing historical narratives to distinguishing between historical fact and fiction. Student learning is assessed using a variety of methods including traditional testing, oral argument, multimedia presentation, dramatic performance, speech and a variety of projects that incorporate course content and skills.

Year Two / Modern World History and Social Sciences

Students in Year Two of the History and Social Studies series take on modern history by way of exploring a historical chronology beginning with the Italian Renaissance and progressing through the Russian Revolution. Students are introduced to various historical themes, such as power and authority, revolution, exchange, cultural interaction, economics, and exploration to gain perspective on these modern historical periods and to identify how the events of this period helped shape the contemporary world. Students examine how historical patterns relate to the five themes of geography (location, place, movement, region and human-environmental interaction). Students are also introduced to a wide variety of historical thinking skills, from distinguishing between past, present and future time to comparing historical narratives to differentiating between historical fact and opinion. Student learning is assessed using a variety of methods including traditional testing, yet also including oral argument, multimedia presentation, dramatic performance, speech, and a variety of projects that provide alternative opportunities for students to demonstrate an understanding of both the course content and skills

Year Three / Global Geography and Social Sciences

Students in Year Three of the History and Social Science series explore a range of topics related to Global Geography. The significance of geography lay not in the mere rote memorization of the place-names on a map of our nation or even the world. The significance is in the fact that it is nearly impossible to find any academic, real-world, or fantastical discipline that does not have a geographic context. From the critical geography of the molecule to the geographic variables of race-relations; from the geographic themes inherent in our democratic process, to the geographic themes so evident in many forms of literature - geography matters! Through the large scale themes of place, location, human-environmental interaction, migration and regions, an inquisitive mind can format some essential questions that illustrate strong connections between the curriculum and the real world; from how the geography of Greece may have affected the economic and social institutions of classical Greek life to why the Democratic party won the last presidential election here in the United States.

Spanish / Pete Covell

6th Grade / Spanish 6

Students will be exposed to the Spanish language in this highly interactive class. Students build a solid foundation of basic listening, speaking, reading, and writing skills, and are exposed to the cultures of Spanish-speaking people. Besides providing instruction in use of the present tense in the Spanish language, students are also familiarized with common functional vocabulary and expressions. Games, short dialogues, plays, and short writing activities complement conversation and formal instruction. The student are encouraged to begin to use Spanish in a more formal way than the instruction they may have received as younger students. Sixth grade students are now more capable of grasping more complicated grammar and vocabulary and these concepts are introduced as the year progresses.

7th Grade / Spanish 7

In this course students begin a more structured study of the Spanish language as they continue to study the present tense. Building on the basic skills learned in sixth grade Spanish, students learn words and phrases useful in market, restaurant, and social situations. They also converse about traveling, chores, feelings, food, health, and nutrition. Major projects include designing a travel guide for a Spanish-speaking nation and creating Public Service Announcement about healthy lifestyles. In addition to the textbook many audio-visual resources enhance the instruction in this class.

8th Grade / Spanish 8

In this course students continue the study of the Spanish language, especially more verbs in the present tense. Using skills learned in sixth and seventh grade Spanish, students practice shopping vocabulary and buying and selling vocabulary. The students begin the study of the past tense through the themes of vacations and modes of transportation. The curriculum continues to reinforce the past tense and expands into ER and IR verbs while the themes of television, movies, computer and communication are presented.

Arts & Technology

Art, Drama, Music, and Technology

Art / Amy Meadow

6th Grade / Art One

Art for the beginning middle school student continues to build on the foundation of the elements of art and principles of design introduced in lower school art classes. Projects become more complex, focusing on process that includes increasing brainstorming and “thumbnail sketching” of ideas, drawing inspiration from a variety of historical and cultural sources, and deriving meaning from their art as well as interpreting and discussing the work of others. The sixth grade artist will develop a more sophisticated command of art materials and will revisit media used before such as paint, watercolor, oil pastel, and charcoal, with more emphasis on craftsmanship and care of these materials. Composition becomes a more important part of the artistic process as well, focusing on balance, perspective, scale, emphasis, contrast, and positive and negative space, with these concepts being applied to abstract as well as representational pieces. More observational drawing skills and techniques also are introduced and students will keep a sketchbook for a portion of the year to develop and hone their skills.

7th and 8th Grade / Art Two

Art for 7/8th grade follows the same structure as 6th grade art while deepening students’ knowledge and experience with a variety of design concepts and sources of inspiration. New techniques and materials are always a focus, however, the artistic process becomes more intuitive as the well-rounded art student learns to combine their ideas with technique and media, the ultimate goal to convey individual thought and expression through successful composition and design elements. Collaboration, artistic interpretation, personal reflection, and experimentation are all a part of the experience, and exposure to artists from past to present and from a multitude of cultures are discussed as well. By the end of 8th grade, the middle school art student has a portfolio showing individual style and a range of skill from drawing to sculpture to digital art applications.

Drama / Eudaemone Jervis Battiulega

7th and 8th Grade / Drama One

This course is an introduction to drama for 7th and 8th grade students at Cascades Academy of Central Oregon. It is a prerequisite for other courses in the Drama series. Throughout the term students will be exposed to drama vocabulary terms, historical figures and principles of acting. Daily we will practice warming up our voices and bodies, play improvisation games and conduct character studies. A stage makeup unit as well as a theater history unit will be included in the program. Stage design and management may be covered as well with time permitting. Students will perform memorized monologues for the instructor at the midterm and participate in a final small group performance at the end of the term.

7th and 8th Grade / Drama Two

This course, the second in the Drama elective series for 7th and 8th graders at Cascades Academy of Central Oregon; past participation with a passing grade in Drama 1 is a prerequisite. Within the first weeks of class students will prepare monologues and audition for roles in a teacher selected play that the entire group will perform at the end of term. Lighting, sets, costumes and makeup will be designed and created by the students. Some students can elect to take on stage management roles while others will act in the short play. Some in class journaling will be assigned throughout the term.

Music / Patrick Pearsall

6th Grade / Music One

In sixth grade music we try to expose the students to as many areas of music as possible. We start with the basic fundamentals of rhythm and melody. We sing songs together as well as perform in a drum circle in order create this foundation. As the year continues, we expand on what we have learned by getting instruments into the kids' hands and getting them working on some songs of their own. We teach basic song writing skills that include writing four and five chord songs and lyrics. We also study music history and discuss what the roots of our favorite music are and where do they come from. We look at the blues and jazz and see how these genres have influenced the popular music that we all listen to today.

7th and 8th Grade / Guitar One

In Guitar One, we start by learning the basics of the instrument and some music theory basics as well. We learn about open chords and a few common rhythms that accompany most of the music we listen to today. We take these chords and rhythms and learn simple songs such as Lean On Me, Three Little Birds, In the Jungle and even Hotel California. By the end of the course we even start writing our own little songs and perform them in small ensembles.

7th and 8th Grade / Guitar Two

In Guitar Two we take the open chords that we have learned and expand to learn barre chords, jazz chords like sevenths and ninths and more complex rhythms and polyrhythms. We also learn about the pentatonic scale, which is the basic blues scale, so that the students can start to learn how to improvise in their music. By the end of the term the students write songs that involve chord changes, melodies and even simple bass lines. They then learn how to arrange and perform these songs in small ensembles.

Technology / Tim Green

The primary goal of the middle school technology program is to build a strong foundation for student's future use of technology and to ensure that our students have the computer and multimedia skills that support their immediate academic goals, by surveying and employing a variety of technological applications that compliment their academic efforts. Core Academic and Arts teachers communicate the technology skills students will need in their respective classes and these skills are the focus of this class. Additionally students will compose and maintain, over a three-year period, a comprehensive electronic academic and artistic portfolio. Additionally, this class also serves as forum for discussion relating to the acceptable and ethical use of technology in the classroom and in our daily lives.

Health & Fitness

Physical Education and Health / Pete Covell

The middle school Health and Fitness program is designed to provide a well-rounded physical education offering that includes physical conditioning and participation in a variety of sports and activities that exploit the resources available here in Central Oregon. Special emphasis is placed on participation and sportsmanship.

Health 7/8 is a 2-year course in understanding healthy behaviors and strategies to make healthy life decisions. The course is taught in 10 45-minute classes each year during the winter trimester. The intention of this course is to explore the many aspects of leading a healthy life, which includes topics related to physical, mental, and emotional wellness. While we will discuss consequences of an unhealthy lifestyle, the focus will be mainly the positive view of what “wellness” means, as opposed to a more traditional approach in health classes that focus on all the ways we can be unwell.

Over the period of two years, students will discuss physical health issues such as sanitation, nutrition, sleep, exercise, the benefits of avoiding drug use (including cigarettes and alcohol), and sexual health (including puberty, making choices, the consequences of sexual activity, safe sexual practices, and resources). We will also discuss mental health issues such as focusing on positivity, what it means to be happy, managing healthy risk taking, and how to cope with stress in our lives. The course will also explore emotional health issues such as maintaining positive relationships with friends, family, and boy/girlfriends, as well as good decision-making when faced with social pressures. The course is partly student directed, and therefore may also touch on various topics that are not mentioned here.

Health is a very broad topic with many perspectives. The class will be mostly focused on communication strategies, decision-making and weighing risk, critical thinking, and resources so each student can apply his/her own values towards how they make their choices. Students will sometimes have homework with discussion questions to be completed with a parent. These assignments are designed to be an avenue for parents and children to engage in open dialogue, but are always optional.

Other Programs

Experiential Education at Cascades Academy



Experiential Education at Cascades Academy is implemented at all levels of our curriculum (Pre-K - 12) and revolves around the central idea of *learning by doing*. The central tenets of this learning methodology include engaging students in a cycle of (1) *activity / experience*, (2) *reflection*, (3) *conceptualization* and (4) *application* of and on our desired learning outcomes. While the classroom affords many opportunities for students to engage in experiential education, we also employ this learning methodology outside the traditional classroom. In the Middle School this manifests in a variety of programs that intend to engage students in the process of *learning by doing*. These programs include *Confluence*, *Outdoor Education*, *Traveling School*, and *Community Service*.

Confluence

The **Confluence Program** is centered on a common block of time when all Middle School students are effectively brought together to explore the opportunities inherent in experiential realm. Activities here include everything from students acting as teacher aides in our Lower School program to students rehabilitating a local pioneer cemetery; from students learning archery skills to students working in internships outside of school; from students planning and conducting service projects to students writing computer code under the guidance of a mentor; from students pursuing their own interests through the 8th Grade Project to students creating web-casts to introduce students to our learning management system. These opportunities not only expose students to a wide variety... but allow them to interact with other middle school students outside of their academic courses.

Outdoor Education

Outdoor Education at Cascades Academy is implemented at all levels of our curriculum (Pre-K - 12) and revolves around teaching *responsibility* for (1) *self*, (2) *others*, and the (3) *environment*, through participation in a host of outdoor activities and experiences. These activities take place in a variety of outdoor settings and occur regularly in the context of standard Field Trips (Pre-K - 12), the *Outdoor School Program* (K-5), the *Middle School Health & Fitness Program* (6-8), the *Confluence Program* (6-8), the *Expeditions Program* (9-12), our *Traveling School Programs* (3-12), and various Service Projects (K-12). Middle School activities include things such as cycling, rock climbing, canoeing, backpacking, caving, hiking, fly-fishing, swimming, orienteering, and downhill and cross-country skiing.

Traveling School

The Middle School **Traveling Program** at Cascades Academy consists of a series of trips, one series in the Fall and another in the Spring, each designed to introduce students to unique and challenging learning opportunities outside of our region that compliment our Academic, Experiential and Outdoor Education Programs. In the Fall the 6th Grade students embark on a 4-5 day trip to the Oregon Coast to Study Marine Biology while the 7th and 8th Grade divide into interest groups to cycle, backpack, or visit the Ashland Shakespeare Festival. In the Spring the 6th and 7th Grade embark on either a trip to Mono Lake to study Geology, Natural and Western History as they camp, backpack, bike, and climb in this unique region of California or embark on a self-contained canoe trip along the *Wild and Scenic* Sycan River in southcentral Oregon. Meanwhile the 8th Grade students travel to San Francisco to spend a week exploring this vibrant city and all that it has to offer. Curriculum related to all these adventures is integrated into our Academic, Experiential and Outdoor strands.

Service Learning

Service Learning is an important part of our school culture and is implemented throughout all divisions of the school. *Service Learning*, a teaching and learning strategy integrating meaningful community service with academic study and reflective practice, enriches learning, builds civic engagement, and strengthens community. Serving our community allows students to create an authentic connection between what they learn in school and what occurs in their community, enhancing critical thinking and teamwork skills. It allows students to make a personal connection with critical issues, creating significant opportunities for social, emotional, and cognitive learning and development. Students are engaged at all levels of service from the identification of need, to the planning and implementation of specific projects.

Students have participated in a wide range of service projects including stream restoration work for the Upper Deschutes Watershed Council, restocking native salmon and steelhead with the Deschutes Basin Land Trust, conducting Pet Food drives for the Humane Society, Fundraising for Equine Outreach, a local horse rescue facility, and restoring the grounds of the Tumalo Pioneer Cemetery.

Laptop Program

In 2013 Cascades Academy implemented a **1:1 Laptop Program** in the Middle and Upper School divisions. To be clear, our program might be better described as a Bring Your Own Laptop (BYOL) program, in which each student in these divisions is required to bring his/her own laptop computer. This program allows our students to take full advantage of the myriad electronic resources that compliment our curriculum, have better access to our Canvas Learning Management System, and more efficiently interface with the ubiquitous technological culture that is a natural part of the living and learning for this generation of digital natives.

The Experience Project

The **Experience Project** requires graduating middle school students, under the guidance of a mentor, to develop a project of their own design to be presented orally during graduation week to the greater Cascades Academy Community. This right-of-passage can take myriad forms and can draw from a host of inspirations, whether formally academic or otherwise. This culminating project serves as a celebration of the Cascades Academy student both as an individual and as contributing member of our community. This project is carried out as part of the History and Social Studies classes in the Middle School