



Cascades Academy of Central Oregon

Experience Exceptional Learning



Upper School Curriculum Guide

	Ninth Grade	Tenth Grade	Eleventh Grade	Twelfth Grade
Language Arts To develop proficiency in the language arts; to experience regional, national and world literature, past and present; to develop an appreciation of and response to literature; to provide a unique means of exploring the spectrum of human concerns and behavior; to acquire insights into human community, its cultures, societies, and languages; to promote personal growth and social development through the use of language.	Explorations in World Literature This course provides for the continuing growth of each student's abilities to be critically analytical and articulate about the pieces of world literature studied through the use of inquiry based discussion. A combination of lecture and seminar, this course asks students to think of literature culturally, thematically and theoretically. They will be asked to engage in examination of literature which expresses mankind's thoughts, feelings and longings, through the exploration of diversity and complexity of the human experience and condition.	A Sense of Place—Comparative Literature Throughout the world's literature, one of the common themes examined, explored and characterized is the human relationship to the communities which he/she participates. Since each individual is a member of a greater global community, students are asked to explore what the sense of community means to them and to relate that to communities found in their literary experience. Students interpret and question each particular author's presence in the contemporary world and hopefully reveal a new path of communication.	Survey of American Literature In this genre study, students read, analyze and evaluate a core of time-honored masterpieces of American literature. The four genres covered include poetry, short story, drama and the novel. Students are encouraged to discover the meanings and continuities that American literature contributes to our world and to foster an awareness and understanding of American culture in our increasingly complex world.	Return to Self—Modern World Literature Being in the position of looking retrospectively upon the twentieth-century does not afford us the luxury of "awakening" from the "nightmare of history" as Joyce's Steven Daedalus wished to do. Instead, surveying the 20th century literary and cultural productions compels students to ask questions about their relationship to the past, their place in the present, and their prospects for the future. Students decipher, discuss, evaluate and appreciate texts on an intellectually challenging level.
Social Studies To develop students' ability to examine the changing course and nature of the human experience from an international perspective; to employ an appreciation of the past in recognizing the reasons for and significance of contemporary events; to empower the individual by encouraging them to engage in their own education and inspiring a lasting affection for history and the responsibilities of global citizenship.	Explorations in Global Geography Students explore the evolution of geography through the application of geographic concepts to historical and contemporary spatial problems. The classic divisions of this discipline, physical and human geography, are examined at length through the common themes of location, place, movement, regions and human environmental interaction. Real world International Communication and Negotiation Simulation: Students in ninth and tenth grades participate in a computer assisted international relations simulation conducted over the Internet along with other schools from all over the world with the goal of addressing a host of international issues from a variety of national, ethnic and religious perspectives. Students study, research and negotiate their position on issues ranging from ethnic cleansing to air pollution to economic sanctions.	Comparative Government and Religion Students pursue an understanding of the governmental, institutional, and religious variation between case-study nations. By evaluating political and religious relationships and applying common concepts used to analyze these respective systems, students engage in a comprehensive and demonstrate comparative knowledge of various systems.	History of the Americas Students investigate the causes and effects of multi-nationalism in the <i>New World</i> with the goal of understanding connections to contemporary events in the western hemisphere. By thinking critically, analyzing information independently and discussing issues constructively, the academically motivated student will exhibit a contextual knowledge of history and develop a deeper understanding of how historians create history through personal perspective.	Twentieth Century World History Drawing upon earlier studies in comparative government students pursue a more in depth examination into the multiple pathways that trace the journey to contemporary historical events. Beginning with an examination of imperialism and twentieth century nationalism, students will proceed to explore the acute impact of WWI, Versailles and Wilson on the course of American foreign policy to the present day.
Mathematics To increase students' abilities to visualize, describe, and analyze situations in mathematical terms; to develop skills in justifying claims, proving conjectures and using symbols in reasoning; to provide the underpinnings for a range of careers by developing strong conceptual understandings; to learn to think and communicate effectively in mathematics.	Geometry Research in teaching geometry recognizes that students pass through a series of levels of geometric thinking: visualization, analysis, informal deduction, and formal deduction, and they must master each level before moving to the next. Consequently this course focuses on an inductive approach to learning geometric principles. Students are asked to develop conjectures based on observed properties of various figures. After students have developed a good sense of geometric principles they are introduced to the rigors of deductive proofs.	Algebra II This course helps students understand why they need algebra, develops their skills of algebraic manipulation and equation solving, provides opportunities to apply geometric knowledge gained in previous courses, develops abilities in reading mathematics and introduces fundamentally important mathematical ideas. The content of the course is designed to create mathematically literate students who have a good grasp of the fundamentals of sophisticated algebra.	Advanced Algebra and Trigonometry This is a course in which students hone their mathematical skills before they begin the study of calculus. The subjects of study are more detailed examinations of topics encountered in algebra. Other topics include polar graphing, trigonometric identities and equations, and detailed functional analysis. Graphing skills are heavily emphasized. Once these topics are mastered the course delves into topics such as probability, statistics, sequences, series and graph theory. The year ends with an introduction to the concept of limit.	Calculus Calculus can be described as the mathematical analysis of changing phenomena. Drawing from topics in previous courses, the concept of limit is developed into methods of differentiation, analysis of functions, methods of integration, and the application of these concepts in fields such as engineering, science and economics. Graphing calculators are used as daily tools since graphical analysis plays a major part in the development of many concepts and everyday problem solving.
Science To teach students how to ask and answer their own questions using the scientific method; to develop procedural and analytical skills through extensive laboratory experimentation; to understand the benefits of computer interface technology to acquire and analyze data; to foster an appreciation for and understanding of the natural world.	Biology Students focus their attention on the science of life. The course begins by introducing the study of the cells and molecules essential to life. Introductory genetics will provide the basis for discussions about the theory of evolution. Students will gain an appreciation for the diversity of life on our planet through observations of live organisms and dissections. The concepts of ecology and human impact are also introduced through student directed long term research. In the first year of this program it is likely that this program will be taught to a combined class of ninth and tenth grade students at the Bend Science Station site.	-Through the Bend Science Station- Chemistry Students will explore the basic concepts of chemistry in a lab setting. Atomic theory, chemical bonding, chemical reaction, and periodic law are some of the topics covered in this lab science course.	Physics Students focus their studies on the laws that govern the motion of objects around us. This one year study of classical mechanics provides student with the skills necessary to understand the following concepts: displacement, velocity, acceleration, vectors, two dimensional kinematics, Newton's laws of motion, force, universal gravitation, circular motion, oscillations, buoyancy, fluid dynamics, and Bernoulli's law.	Science Elective <ul style="list-style-type: none"> * Anatomy and Physiology * Independent Research * Invertebrate Zoology * Geology * Marine Biology
Spanish To develop working knowledge of the complex structures of basic Spanish and to expand on the cultural themes introduced at the previous level; to expose students to situational context requiring thoughtful rather than mechanical response; to develop equally, written, oral, reading and listening skills; to advance the personal communication skills of all students.	Spanish IV Students learn to describe activity and to narrate sequential events in present and past tenses. They develop the ability to employ a variety of grammar structures and tenses including: present, preterit, imperfect, future, imperative, conditional, present perfect, present subjunctive, impersonal, indirect object pronouns, and using past participles as adjectives. Students receive equal emphasis in written and spoken expression and the refining of reading and listening skills.	Spanish V Students learn to read newspapers, discuss current events; express doubt or uncertainty; give advice, make suggestions and communicate emotional reaction. Students also learn to express desires and needs and to speak of past, present and future events. Students review important grammatical structures and learn the pluperfect indicative as well as the imperfect and pluperfect subjunctive. Students continue to refine written and spoken expression, reading, and listening skills.	Spanish VI Students explore a variety of language contexts including dramatic performances, novels, poetry and short stories to reinforce the grammar and vocabulary base acquired in earlier courses. Students work on becoming proficient speakers and writers. Writing exercises include interpretive and expository papers. Students are introduced to techniques of literary analysis and emphasis is given to mechanics as well as advanced instruction in written and oral expression.	Spanish VII This course further exposes students to literature of the Spanish-speaking world, chosen from all major genres. Spanish grammar is reviewed and the techniques of literary analysis are reinforced. Frequent essays and research papers are required. Student receive lecture in Spanish and engage in discussions of literary, social and historic topics in Spanish. Students who put in additional time and effort are prepared to take the Spanish Advanced Placement exam in May.
Technology To master and extend the application of technology as a strategy for genuine enhancement of learning and a powerful tool of communication for expressing our ideas, knowledge and achievement.	Integrated Technology Technology instruction will be integrated in meaningful ways across the curriculum. The applications will include the mastery and extension of word processing skills, communication skills, database manipulation, spreadsheet functionality, multimedia skills and information acquisition and manipulation skills in all core academic areas. Instruction will employ popular Microsoft® software programs including Microsoft Word®, Microsoft Excel®, Microsoft Publisher®, Microsoft FrontPage® and Microsoft PowerPoint®, as well as other software such as ArcView™ Geographic Information Systems software, the International Communication and Negotiation Simulations Network Community (ICONSNet®) and LoggerPro 2.2™. Ethical use of technology and instruction of citation protocols will be integrated throughout the curriculum.			
Art and Drama To expose students to basic elements of artistic expression, media and design; to explore relevant art history as it relates to class work.	Studio Art This two semester course introduces students to the basic concepts of drawing, painting and design. Students explore a wide range of media, including pencil, charcoal, colored pencil, pastels, acrylic painting and woodworking in their exploration of the elements of art and the principles of visual organization. Emphasis is placed on expressively interpreting an idea. Examination of influential artists and relevant art movements is also a significant component of this course. Students will develop a body of work to be included in their portfolio.			
Activities and Sports To familiarize students with athletic opportunity within Deschutes County; to maximize the opportunities provided by unique region in which we live; to develop a life-long love of physical activity.	Skiing, Golf, Tennis, Equestrian, and Intramural Sports It is the goal of Cascades Academy to offer limited after-school sport opportunities. With our small student body, we will likely offer sports in which individuals can participate and compete. These opportunities include competitive and recreational skiing, competitive golf, competitive tennis and a recreational equestrian club. Beyond these opportunities, Cascades Academy will provide a host of intramural activities and games such as the every popular "April Insanity" three-on-three basketball tournament and other intramural tournaments such as ping-pong and a school-wide Olympiad. The emphasis of all these opportunities will be on personal health and well-being with an eye toward developing a life-long enjoyment of physical activity and sport.			
Portfolio of Achievement	"The Vitae"	Utilizing the skills mastered through the completion of the Middle School Publishing Portfolio, Upper School students will proceed to create a body of work that represents their intellectual growth and achievement. The Vitae Portfolio is content driven and allows each individual to develop an awareness of their own learning style. Students will electronically log a variety of formative assessment materials including written, oral, and graphic materials. Through these mediums a wide range of skills can be demonstrated. By allowing each student the opportunity to choose submissions, individual interests and strengths are emphasized. Because this is a four year cumulative project, students have the opportunity to reflect on their progress and quality of work in relation to previously set and clearly articulated goals. Students must select and justify portfolio choices, monitor and comment on their progress, and refine future expectations. As Juniors and Seniors, a student designed and maintained webpage that exhibits portfolio selections will serve as an extension of the Resume Project.		