

## Graduation Requirements

The Bear Creek School's curriculum is a rigorous college preparatory program. All students take a balanced and comprehensive core of classes. Advanced Placement and Honors courses are offered.

The following graduation requirements allow students to meet or exceed the requirements for colleges and universities. All students must complete their senior year on the Bear Creek campus to qualify for graduation.

### Required Credits

4.5	credits English and Rhetoric
4.5	credits History <sup>1</sup> (including Washington State history and government)
3.0	credits Mathematics <sup>2</sup>
3.0	credits Science <sup>2</sup>
3.0	credits Languages <sup>2</sup> (credits in the same language)
3.0	credits Christian Studies
1.5	credits Physical Education
0.5	credits Health
1.0	credits Fine Arts <sup>3</sup>
1.5	credits Additional (electives and/or additional courses in required subjects)
0.5	credits Senior Capstone Project
27.0	credits (minimum)

### Required Community Service

Each Bear Creek graduate must complete 100 total hours of community service which may be completed at any point during grades 9 – 12. To help students remain consistently involved, each year students are required to serve four hours in the local community, four hours at Bear Creek, and two hours globally, all of which are credited toward the 100-hour graduation requirement.

Transfer students have two options for completing this requirement:

1. A student may prorate 25 service hours per year he/she was enrolled elsewhere.
2. A student may provide satisfactory official documentation of previous service completed.

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<sup>1</sup> Students who have successfully completed grade 8 at Bear Creek have met the Washington State history and government high school graduation requirement. Transfer students entering Bear Creek after grade 8 must also fulfill the requirement and may be required to take a JanTerm course or an independent study arranged through the Registrar.

<sup>2</sup> Students must have 4.0 credits in one of the following subjects: Math, Science, or Languages.

<sup>3</sup> The University of California requires one year-long course of visual and performing arts chosen from the following: dance, drama/theater, music, or visual art.

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## Christian Studies

**CS 9 Historical Theology:** In this course, students study the theology of the ancient Church while connecting yesterday's faith lessons to our life of faith today. We will look at the life of the early church and how God used ordinary people to accomplish extraordinary things. Specifically, we will explore the early Church's understanding of the Bible, the challenges the Church faced, and the voices that pioneered theology. We need to know how God has been at work to help us see how he continues to be at work. When we see our place in God's grand story, it gives us unique perspective to love God and love others. (0.5 credit)

**CS 10.1 Systematic Theology:** In this course, students study theological developments through the Medieval and Renaissance periods and discuss the basics of systematic theology while reading and analyzing some of the faith's major thinkers as they approach subjects such as the nature of God, the nature of salvation, and the nature of the Church. Students will be tasked with wrestling with Christianity's seminal questions and creating questions of their own in turn. (0.5 credit)

**CS 10.2 Logic:** In this course, students address issues surrounding precise thinking and logic. After consideration of a Christian foundation for logic and logical first principles, students study right reason, valid inferences and the attending fallacies, formal and informal. Students learn to apply the rules of logic through examination of statements and arguments from both cultural and biblical sources. (0.5 credit)

**CS 11 Philosophical Theology:** In this course, students engage in a study of modern Christian thought and practice, particularly as it has been influenced by and engaged with modern philosophy in general. Students will analyze the question raised by the ethicist Charles Taylor: What impact has secular thinking had on modern understanding of self and our relationship with others? Over the course of the semester, students study the differences between secular thinking and transcendent thinking and the relationship between faith and reason. Students take in-depth looks at ethics, epistemology, human self, and how we should live. (0.5 credit)

**CS 12 Christianity and Contemporary Culture:** In this course, students learn to engage multiple worldviews and examine how they compare and contrast with each other. Students look at the distinct responses to core worldview areas such as man’s basic problem and how to solve it. Students examine lingering struggles they may have with the Christian worldview and study how Christians have addressed those issues. Students explore answers to the following questions: What are the distinctive parts of the Christian worldview? How do I identify someone’s worldview? How do I understand difficult issues with Christianity? Can I articulate my worldview? Finally, students begin to prepare for their Senior Capstone Project by selecting a topic for approval and making any necessary arrangements before the project begins in May. (1.0 credit)

## English and Rhetoric

**E 9 Honors Ancient Literature:** In this course, students explore the ancient idea of “hero” by reading ancient literature from the Sumerian, Hebrew, Greek, and Roman cultures. In addition to reading literature, students memorize literary terms that inform their study of various texts. The writing component of the class entails studying grammar in context and crafting persuasive, compare/contrast, and timed writings. (1.0 credit)

**E 10 Honors Medieval and Renaissance Literature:** This course covers various genres of medieval and Renaissance literature through the reading of epic poetry, drama, and novel. The biographical, historical, and philosophical contexts of each work are the focus of class discussion. Writing centers on the development of analytical, persuasive, and expository composition. Basic grammar skills are reviewed and developed further in the students’ writing and selected assignments. The review of key literary terms is incorporated throughout the course. Through writing, reading, listening, and speaking, students develop their critical thinking skills, including Socratic seminars, rhetorical analysis, and team collaboration. (1.0 credit)

**E 11.1 Honors Enlightenment and American Literature:** Specific literary eras—the Enlightenment, Romanticism, Realism, Modernism, and Post-Modernism—are considered from the standpoint of American authors in the context of fiction (e.g. *The Great Gatsby*) and non-fiction (e.g. *The Narrative of the Life of Frederick Douglass*). Students engage in selected course readings closely and critically, giving attention both to the details of language such as syntax, diction, imagery, schemes, tropes, and devices, as well as worldview ideology and critical literary theory. Compositions for this course are based on rhetorical modes such as narration and process/analysis, in addition to SAT-style essays. The overall course goal is to trace the progression of ideas and themes throughout the eras, understanding what the American experience looks like in many times and places while developing a personal and academic writing style. (1.0 credit)

**E 11.1 Advanced Placement English Language and Composition:** Students develop their skills as close readers of text and adept writers of arguments. Various pieces of American literature and a diverse selection of nonfiction spanning six hundred years serve as the context for these readings and arguments. Students work on building their vocabulary of literary terms as a way to understand methods central to nonfiction. This course prepares students to take the AP Language and Composition exam which focuses on the analysis of style, the crafting of arguments, and the synthesizing of sources around an argument. (1.0 credit)

**E 11.2 Rhetoric:** This course cultivates eloquent speaking by studying and practicing classical rhetorical theory. Students develop an understanding of classical rhetoric by writing and delivering a series of short speeches that focus on developing delivery skills such as eye contact, vocal energy, posture, and pausing. While continuing to develop their delivery tactics, students then move to a longer narrative speech. After this speech, the students propose a thesis and antithesis that argue two sides to a contemporary issue of their choosing. (0.5 credit)

**E 12 Advanced Placement English Literature and Composition:** This course engages students in the careful reading and critical analysis of imaginative (fictitious and poetic) literature through the ages. Writing assignments include expository, analytical, and argumentative essays. Students study the elements of style, correct and academic grammatical construction, and logical organization of ideas. Students develop the vocabulary necessary for college-level reading and writing. (1.0 credit)

**E 12 Honors Senior English:** This course explores the collegiate themes of society, men, women, and psychological development. Seniors approach these themes through the rhetoric stage and a Christian worldview, interpreting, analyzing, and defending their beliefs in the form of discussions, essays, and creative writing. Literature from all eras serves as the springboard for students' personal reflection, historical understanding, and literary evaluation. (1.0 credit)

### *Fine Arts: Performing Arts*

**Advanced Placement Music Theory:** This course is designed to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a musical score. Skills developed in this course include composition, dictation, harmonic analysis, structural analysis, ear training, and sight-singing. The course will prepare students for studying music while in college or to simply further their technical study of music. This is not a performance-based course. The content of the AP Music Theory course is equivalent to the first year of college-level music theory. Open to juniors and seniors only. Prerequisite: Students must complete and pass a music fundamentals test. (1.0 credits)

**Music Theory:** This fall semester course is designed to give students a strong foundational knowledge of how music is organized. Students will learn specific methods for cultivating musical fluency using notes, key signatures, scales, intervals, chords, and rhythms. Skills of musical analysis, dictation, ear training, sight-reading will also be introduced. Students who successfully complete the class will be better prepared to continue their musical studies and/or continue with college level music classes. Open to juniors and seniors only. (0.5 credit)

**Concert Band:** Upper School concert band is an instrumental performing ensemble. Concert band members continue to master their skills on a musical instrument. The concert band performs at one regular concert and other performance opportunities that may arise. Concert band members are also encouraged to play with the Pep Band during home basketball games. Students in the concert band are eligible to participate in the Northlake Music Region Solo and Ensemble Contest, as well as to audition for the All-State and All-Northwest honor bands and orchestras. This fall semester course may be taken more than once. Prior instrument knowledge required. (0.5 credit)

**Concert Choir:** Upper School concert choir is a performing ensemble with multiple required performances, including one regular concert and other performance opportunities that may arise. Students in the choir program are eligible to participate in the Northlake Music Region Solo and Ensemble Contest, as well as to audition for the All-State and All-Northwest honor choirs. Emphasis is placed on vocal training, sight singing, music theory, and choral blend. This fall semester course may be taken more than once. (0.5 credit)

**Jazz Band:** In this course, students learn to play jazz styles on their own instruments. All instruments are welcome. The class explores the jazz styles of swing, Latin, and funk. Students learn and build on improvisation principals. Students in this class perform at two concerts each year in addition to many other school and community events. Jazz band members are also encouraged to play with the Pep Band during home basketball games. The band rehearses 2 – 3 times a week before school as a zero-period class. Jazz combos may be formed for rehearsals during other times. This year-long course may be taken more than once. Prior instrument knowledge required. (0.5 credit, full year)

**Mixed Ensemble:** Mixed ensemble is an auditioned class open to concert choir students who exhibit advanced skill levels in music literacy and vocal technique. Auditions are held in the first two weeks of the school year. Repertoire is chosen to develop technical, musical, and performance skills and requires a desire for excellence on the part of its members. All songs are performed *a capella* and include Renaissance, vocal jazz, and contemporary *a capella* genres. Students are expected to perform in two concerts annually, Northlake Music Region Solo and Ensemble Contest, and other possible opportunities. The class meets once each week before school with occasional additional rehearsals as needed. (0.25 credit, full year)

**Musical Theater:** This spring semester course is designed for drama and choir students with particular interest in musical theater performance and who want to participate in Bear Creek's quadrennial musical production. In this course, students integrate their skills in acting, singing, and dance in a musical theater production. Some after school and weekend rehearsals are required. (0.5 credit)

**New Play Development:** This course offers students the opportunity to share stories they have been itching to tell. Students will collaborate to compose short plays and learn the process of building a stage-worthy script. Participants will produce a story about a historical figure or an event or create a new imaginative work. Emphasis is placed on character development, writing dialogue, and conflict/resolution. Students explore the process of new play development from page to stage. This course provides a foundation for further study in playwriting, directing, acting, marketing, set design, costuming, and producing. (0.5 credits)

**Pit Orchestra:** This spring semester course is a hybrid between band and pit orchestra for Bear Creek's quadrennial musical production. Students will perform as part of the production, learning pit orchestra parts, in addition to learning band music and performing at special events such as Commencement, and possibly a festival. Some after school and weekend rehearsals are required for the musical. (0.5 credit)

**Technical Theater:** This fall or spring semester course will survey the various elements of a theater production, exposing students to audio engineering, stage lighting, set design, set construction, and stage management. Students will perform the technical roles for the fall or spring Upper School drama productions (sound, lighting, stage management, set and scene movement) and may have the opportunity to assist with various Lower School, Early Middle School, and Middle School productions. Some after school and weekend rehearsals are required in addition to all scheduled Upper School fall or spring drama performances. (0.5 credit)

**Theater Production:** This fall semester course is designed for students of varying theatrical experience to collaborate and perform a classical or contemporary play. Students will build skills in character development, on-stage relationship work, and explore atmosphere/mood. Participation in each semester's production is required. While much of the course is dedicated to the developing a production, students also work on improv, playwriting, audition techniques, theater history, and movement. This course may be taken more than once. (0.5 credit)

### Fine Arts: *Visual Arts*

**Film and Animation:** In this year-long course, students explore the possibilities of storytelling through film and animation. This course will give students both the narrative craft and visual techniques necessary to bring a story to life on screen. It is a hands-on production course emphasizing aesthetics, creativity, and technical expertise utilizing up-to-date industry-standard tools, Adobe® Creative Suite, and other programs to build a foundation for further study. Prerequisites: Photography 2 and Graphic Design 2; or instructor permission. (1.0 credit)

**Graphic Design 1:** In this course, students examine the principles of design utilizing modern digital technology. Students acquire an understanding of the process of design, design fundamentals, digital art tools, and creative thinking. Students gain a basic proficiency in Adobe® Creative Cloud applications (Photoshop®, Illustrator®, InDesign®). This course includes project-based learning, lectures, and critiques. (0.5 credit)

**Graphic Design 2:** Using the working knowledge obtained in Graphics Design 1, students further enhance their technical abilities and advanced knowledge of design principles. Students delve deeper into the creative opportunities of Adobe® Creative Cloud applications (Photoshop®, Illustrator®, InDesign®) and other programs, while developing their voices as visual artists. Prerequisite: Graphic Design 1 (0.5 credit)

**Photography 1:** In this course, students learn about the history of photography, as well as the elements and principles of art through photography. Through a series of projects, students gain proficiency in working with digital single lens reflex (DSLR) cameras, digital photo editing, and basic photo composition. Students explore the use of shutter speed, ISO, exposure, focal length, depth of field, and lighting. (0.5 credit)

**Photography 2:** Using the working knowledge obtained in Photography 1, students build their skills as they transition from studying techniques to exploring photography further as an art form. Students learn advanced editing skills, use studio equipment, explore the art of composition and create a comprehensive portfolio by the end of the semester. Prerequisite: Photography 1 (0.5 credit)

**Advanced Graphics and Photography:** This course is designed for students with serious interest in the practical application of digital art and photography. While exploring photographic and digital media with the camera and computer, each student develops a body of work that reflects a range of problem-solving and ideation, personal voice, and versatility with techniques to demonstrate his or her abilities compiling a personal portfolio by the end of the term. Prerequisites: Photography 1 and 2 and Graphic Design 1 and 2; or permission of instructor. This course may be taken more than once (0.5 credit).

**Studio Art 1:** This course introduces students to the elements of visual art through an exploration of foundational skills and techniques in various media including drawing, painting, collage, and/or sculpture. This course includes project construction, lecture, critique, and becomes the foundation needed to progress through other art courses. (0.5 credit)

**Studio Art 2:** Students build on their knowledge gained in Studio Art 1 to further utilize and integrate the elements of visual art while being introduced to the principles of design. Emphasis is placed on color mixing, painting techniques, direct observation, mixed media concepts, as well as further understanding of composition, color theory, critical thinking, and problem-solving. This course involves project construction, lecture, and critique. Prerequisite: Studio Art 1 (0.5 credit)

**Studio Art 3:** Students expand skills acquired in Studio Art 1 and 2 by further developing their drawing and conceptual abilities. In this course, students explore intermediate to advanced techniques in drawing and various art media while focusing on compositional principles of visual art and strengthening visual problem-solving skills. A variety of media are explored including graphite, pen and ink, colored pencil, charcoal, oil pastel, acrylics, collage, sculpture, and/or mixed media. This course requires advanced commitment, focus, and drawing capabilities. Prerequisites: Studio Art 1 and Studio Art 2 (0.5 credit)

**Sculpture and Mixed Media:** Students utilize and integrate the elements and principles of visual art in the concentrated area of sculpture and mixed media art. The relationship between form, space, and concept is explored as students expand their understanding of three-dimensional art processes and materials. This course involves project construction, lecture, and critique. (0.5 credit)

**Advanced Studio Art 1:** In this year-long course, student enhance technical and conceptual skills, develop a personal artistic style, and refine the direction of his or her art. Students develop portfolio pieces and delve into advanced media techniques. This course requires a high level of commitment which may require out of class work and project time. Prerequisites: Studio Art 1, Studio Art 2, and Studio Art 3, or permission of instructor (1.0 credit)

**Advanced Studio Art 2:** This year-long course develops the student-artist. Each student collaborates with the instructor to develop a body of artwork in the medium of his or her choice. Media pursued may include drawing, painting, sculpture, computer generated graphics, photography, mixed media, or a blend of art disciplines for which the student has a particular passion. Each student develops a portfolio and an artist statement, builds an artist resume, and possibly plans a gallery show (in his or her senior year). This course is highly recommended for students who are planning to study art in college and/or possess a deep passion for art. This course requires a high level of commitment which may require out of class work and project time. Prerequisites: Studio Art 1, Studio Art 2, and Studio Art 3, plus one additional visual arts course (Sculpture and Mixed Media, Graphic Design, Photography, or Advanced Studio Art 1), or permission of instructor (1.0 credit)

### General Electives

**Advanced Placement Computer Science A:** The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. This class meets during zero period. Prerequisite: Algebra 2 recommended but not required. (1.0 credit)

**Philosophy of Religion:** In this course, students will engage with the philosophy of religion, discussing some of the various religious issues, such as the concept of God; religious experience; the problem of evil; science, religion, and evolution; and religious pluralism. Students who participate should be comfortable reading philosophical material (with assistance and guidance), proficient in critical thinking and reading comprehension, and willing to be stretched in new ways in thinking. (0.5 credit)

**Yearbook Editor:** Yearbook Editor is an application-only course, and instructor permission is required. The yearbook editor plans, directs, and executes the Upper School yearbook and performs the following the required duties. Manages the publication's content and quality as well as a staff of peers during JanTerm; creates a theme and plans for using the theme; designs or oversees the cover design, endsheets, and any theme-related spreads, including opening, closing, and dividers; attends weekly meetings with yearbook advisor to review deadlines, as well as upcoming photo and copy coverage; edits ladder as needed and approves any changes to the ladder as coverage develops; together with advisor, plans JanTerm schedule and builds yearbook excitement; checks and prepares all spreads for submission; completes and submits pages by final deadline; helps with yearbook distribution. (1.0 credit)



## History

**H 9 Honors Ancient and World History:** This course focuses on the development of Western civilization, which forms the basis of United States culture. Students will study cultural developments, religions, trade, communication, and the role of geography in determining the course of historical events. In the second semester, students examine some of the great non-Western civilizations. As well as gaining factual knowledge, students develop their skills in writing, critical thinking, discussion, and evaluation of primary sources. (1.0 credit)

**H 10 Honors European History:** In this course, students study the story of European civilization from the middle ages through the Industrial Revolution. In addition to historical content, students develop skills in careful reading, historical analysis, and expressing ideas orally and in writing. (1.0 credit)

**H 10 Advanced Placement European History:** This challenging course is intended to be the equivalent of an introductory-level college course. Students develop the intellectually virtuous habits of reading carefully, clearly analyzing both evidence and ideas, and expressing historical understanding orally and in writing. Students cultivate a love of and a respect for the past and gain a thorough understanding of the main events and ideas in modern European history. (1.0 credit)

**H 11 Honors United States History:** This course is an in-depth study of United States history and is designed to provide students with a solid understanding of the development of the United States. Students explore geographic, political, cultural, and economic characteristics of American history from the settlement of Jamestown through the presidency of Ronald Reagan. Readings from the text and primary sources, discussions, lectures, and written critical analysis are utilized to facilitate the study of U.S. history. (1.0 credit)

**H 11 Advanced Placement United States History:** This course is a rigorous study of U.S. history from the early settlement of the nation through the presidency of Ronald Reagan. Students work to master content, which requires a significant amount of reading. Reading is primarily drawn from our classroom text, but also includes some primary sources. The Advanced Placement exam requires the writing of three essays, so in preparation for the exam, students will work to hone their writing skills. In this course, students gain knowledge of the history of the U.S. and learn to critically assess issues verbally and through written work. (1.0 credit)

**H 12.1 Art History, Culture, and Appreciation:** In this course, students survey western art and aesthetics from the Renaissance to the present. The course introduces students to the broad artistic and cultural heritage of Western Civilization and particularly challenges students to reflect on beauty and how it relates to truth and goodness. (0.5 credit)

**H 12.2 United States Government and Politics:** This course is a survey of the origin, structure, and functions of the United States government. Students are introduced to basic economic concepts, a comparison of other types of political systems, and an overview of American foreign policy. Readings in current events, classroom discussions, and completion of a research paper are key components of the course. (0.5 credit)

## Languages

**French I:** This class introduces students to French language and culture through language immersion. Students begin to make friends with and demystify French by using it right from the start. Students learn how to speak, read, listen, and write in French. By focusing on communication at the Novice proficiency level, students will be able to engage in basic conversation and both ask and answer questions in French. They will write simple thoughts, ideas, and stories in complete sentences. French I students will also perform a short play each semester. The goal for the end of French I is the Novice High proficiency level. No prerequisite. (1.0 credit)

**French II:** Building on French I, students develop their proficiency skills toward the Intermediate level, continuing to use only French in class. Their study of grammar will give them the skills to better understand and express themselves in French, in the past, present, and future. Students will begin to study French history and will also engage with traditions, cultural practices, and values of French society. French II students will perform a short play each semester, as in French I. The goal for the end of French II is the Low to Mid proficiency level. Prerequisite: French I (1.0 credit)

**French III:** French III students will grow in their ability to comprehend, speak, and write complex content. By refining pronunciation and exploring more nuanced aspects of syntax, students will begin to identify and produce more complex patterns in French language and grammar. Students will be able to write detailed creative stories and unified, reasoned arguments. Cultural learning will accompany the *French in Action* curriculum, as students learn about varied aspects of French society. Students will also spend time reading and discussing short stories from the children's classic, *Le Petit Nicolas*. By the end of the year, students will encounter Advanced level material while aiming to perform at Intermediate Mid to High proficiency levels. Prerequisite French II (1.0 credit)

**French IV:** In this course, students encounter varied content relating to six key themes: Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities, Families and Communities, and Beauty and Aesthetics. A more rigorous study of verb tenses and syntax will equip students to engage with abstract questions and express their ideas with greater clarity. In the second semester, French IV students read and analyze *Le Petit Prince*, the classic novel by Antoine de Saint-Exupery. By the end of the year, students should be able to speak, read, listen, and, write at the Intermediate High to Advanced Low proficiency level. The themes of the class coincide with the six AP French themes, therefore, students who wish to sit for the AP French Language and Culture exam would benefit from this class, though supplementary work and study would be encouraged. Prerequisite: French III (1 credit)

**Latin II:** This course provides an introduction to the complex sentence. Students master the basic uses of the cases in all declensions, many pronouns, and the use of the relative pronoun. They learn indirect statement, active and passive voice of verbs, all tenses of the indicative, and the perfect participles. Students also can expect to double their Latin vocabulary, to learn many Latin quotations, and to continue to build their fluency with English derivatives. Students explore Roman to early medieval political history, Roman literature and mythology, classical education, art, architecture, and early Christian writings. Prerequisite: Latin I equivalency (e.g. Middle School Latin 8, outside course, or approval of Upper School Latin teacher) (1.0 credit)

**Latin III:** In this course, students master the components of the complex sentence. They learn the subjunctive mood and its uses in purpose clauses, indirect command, and question. Students continue to master the indirect statement and its sequence of tenses. Latin vocabulary increases significantly along with student mastery of Latin word roots in English. Besides adapted passages from medieval and Renaissance authors, students read unadapted passages of classical Latin literature. Students are introduced to Latin literature and integrate what they already know about Western civilization and Christianity with their reading. Prerequisite: Latin II (1.0 credit)

**Latin IV:** Students continue to improve their handling of complex sentences while being introduced to Latin literature. Students are expected to know the components of the complex sentence and continue to master it by reading more original passages of Latin. Students begin to understand the range of meanings available in Latin vocabulary and how this affects the reading of literature. Students begin to notice and think about genre, figured language, and quantitative meter. The importance of classical literary style in the Renaissance is considered. Through assigned reading, students continue to apply and extend what they know about Western civilization and Christianity. *Students also may concurrently register for and receive college credit from the University of Washington's Latin 103 through "UW in the High School."* Prerequisite: Latin III (1.0 credit)

**Spanish I:** In this course, the immersion method is used to introduce students to the spoken language. Students learn to communicate on topics related to their lives, such as greetings, descriptions of physical characteristics and character traits, family, numbers, parts of the body, time and daily schedules. Students learn to interact in the target language as they internalize grammatical structures. This course focuses on learning nouns, regular and irregular present tense verbs, adjectives, personal pronouns, direct and indirect objects and possessive adjectives. Students work individually, in pairs, and in groups. Students also watch culturally appropriate movies and books such as *Pobre Ana* or *Piratas del Caribe y el mapa Secreto* (1.0 credit)

**Spanish II:** In this course, students continue with the immersion model. While they are still learning to communicate about their personal lives, families, feelings, and emotions, the content expands to include topics such as the city, routines, nutrition and travel. This course expands on vocabulary and grammar, including the preterit, imperfect, and future tenses. Students start researching and writing about different countries and presenting orally. Students work individually, in pairs, and groups. Students also read books such as *El Nuevo Houdini*. Prerequisite: Spanish I (1.0 credit)

**Spanish III:** Students comprehend and communicate orally and in writing about a wide variety of personal, cultural, and ethical concepts. Grammar study continues throughout Spanish III, focusing on expanding concepts such as the past tenses, reflexive verbs, and if-clauses, as well as introducing the subjunctive mood. The topics discussed include relationships among family and friends, work and the community, the future of technology and medicine, and challenges facing the environment. Students make a deeper study of the world's social, political, and economic realities by reading online news articles in the target language including, but not limited to, CNN, BBC Mundo, and National Geographic. A book based on a true story is introduced for reading and analysis. Films may include *La Misma Luna*, *Los Sobrevivientes*, and *McFarland USA*. Class is conducted 95% in Spanish. Prerequisite: Spanish II (1.0 credit)

**Spanish IV:** In this course, students continue to develop accuracy in speaking and writing through the use of more abstract vocabulary and more advanced grammar structures. Students' knowledge is expanded to encompass topics such as Identity, Hispanic customs and traditions, climate change among others. Students express their opinions, compare and contrast, reflect, and formulate original thoughts both in writing and speaking. Texts we read may include *Cajas de Carton*, *La Casa en Mango Street*, and works by other contemporary Spanish and Latin American authors. Prerequisite: Spanish III (1.0 credit)

## Mathematics

**Geometry:** By enhancing logical thinking and deductive reasoning, geometry provides a foundation for problem solving that is necessary for success in subsequent math courses. The first semester focuses on the development of geometric proofs using definitions, properties, postulates, and theorems. Second semester topics include transformations, triangle similarity, right triangle trigonometry, angle and segment relationships in circles, areas of polygons, and volumes of solids. Prerequisite: Algebra 1 (1.0 credit)

**Algebra 2:** This course includes topics in linear equations, inequalities and functions, systems of linear equations and inequalities, matrices and determinants, quadratic functions, polynomials and polynomial functions, powers, roots and radicals, exponential and logarithmic functions, rational equations and functions, quadratic relations and conic sections, sequences and series, and trigonometric ratios and functions. Prerequisite: Geometry (1.0 credit)

**Precalculus:** This is a traditional precalculus course, uses the same textbook as Honors Precalculus, and covers functions, trigonometry, systems of equations, sequences, probability, and analytic geometry. The course is appropriate for students who want to take the regular (non-AP) calculus course at Bear Creek before college. Students will be well prepared for AP Statistics. Prerequisite: Algebra 2 (1.0 credit)

**Honors Precalculus:** This course solidifies the student's knowledge of algebra, geometry, and trigonometry in preparation for enrolling in AP Calculus AB the following year. It is rigorous and fast-paced, covering topics such as functions, trigonometry, systems of equations, sequences, probability, analytic geometry, vectors, and limits. The course concludes by introducing students to calculus through limits. Prerequisite: Algebra 2 (1.0 credit)

**Calculus:** This course is a traditional calculus course and uses the same text as AP Calculus AB. It begins with the study of limits and continuity and includes the study of derivatives and their applications, and definite integrals and their applications. Students will be prepared to continue their study of mathematics at the university level. Prerequisite: Precalculus or Honors Precalculus (1.0 credit)

**Advanced Placement Calculus AB:** The course of study includes properties of functions, limits, differential calculus, and integral calculus. The use of symbolic differentiation and integration utilities is included where appropriate. Prerequisite: Precalculus or Honors Precalculus (recommended) (1.0 credit)

**Advanced Placement Calculus BC:** This course is an extension of AP Calculus AB and is offered to students after they have successfully completed AP Calculus AB. Topics include the further study of limits, derivatives, definite and indefinite integrals. Students analyze planar curves given in parametric form, polar form, and vector form. The course includes the study of polynomial approximations and series with error analysis. Prerequisite: AP Calculus AB (1.0 credit)

**Advanced Placement Statistics:** This course is an introductory college-level statistics class designed to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Course topics include exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Prerequisite: Algebra 2 (1.0 credit)

**Multivariable Calculus:** This course builds upon the material covered in AP Calculus AB and BC. Unit 1 introduces vectors, dot-products, cross-products, projections, lines, and planes—the essential elements of linear algebra needed for navigating multi-dimensional problems. In Unit 2 students investigate vector functions, giving special attention to space curves, velocity, acceleration, tangent vectors, normal vectors, curvature, and arc-length. Unit 3 explores multivariable functions, looking at surfaces, partial derivatives, directional derivatives, gradients, tangent planes, optimization and Lagrange multipliers. In Unit 4 the focus turns to integration. Concepts include double and triple integrals in Cartesian, polar and spherical coordinates, as well as the calculation of surface area, volume, centers of mass, moments of inertia and Jacobians. The final unit turns to vector fields and line integrals. Topics include conservative vector fields, curl, flux, Green's Theorem, surface integrals, Gauss' divergence theorem and Stoke's theorem. Prerequisite: AP Calculus BC (1.0 credit)

## Physical Education

**Health:** In this course, students learn the integration of physical, mental, social, and spiritual dimensions of a healthy lifestyle. The information presented covers several health issues that students analyze and discuss. Students assess their personal health habits as well as explore what the biblical view of humanity and the human body. Students become familiar with the eleven body systems. They learn strategies for healthy eating, as well as strategies to avoid unhealthy substance usage/abuse that has a negative effect on health. The course includes student certification by the American Red Cross in First Aid/AED/Hands-only CPR. This course presents current health issues from a Biblical perspective. (0.5 credit)

**Multi-Sport Experience:** Students in this fall semester course learn the rules and history of Flag Football, Basketball, Volleyball, Badminton, Ultimate Frisbee, Handball, Pickleball, and Soccer. Techniques for each sport will be demonstrated and practiced. Participants will improve their fitness levels and knowledge of each sport as they work toward skill mastery and engage in tournament play. This course seeks to provide fellowship with other students, a vigorous work-out, and a great deal of fun. (0.5 credit)

**Physical Education:** Students may fulfill the Physical Education graduation requirement by:

- participating on a Bear Creek athletics team (0.5 credit earned per sports season completed),
- enrolling in Strength Training or Multi-Sport Experience electives (0.5 credit earned per semester)
- participating in the Bear Creek Ski & Snowboard Program (0.25 credit earned per season if lessons are taken), or
- participating in 25+ hours (in a semester) outside workout program pre-approved by the Registrar (0.25 credit).

**Strength Training:** This course offers students the opportunity to participate in weight and conditioning programs. The instructor guides the students to create their own sound, efficient weight training programs that meet their specific goals and objectives. This course may be taken more than once. (0.5 credit)

## Science

**S 9 Conceptual Physics:** This course approaches the subject of physics by emphasizing the *concepts* of physics, thus stimulating students' higher level cognitive skills. The value of teaching physics conceptually is not in minimizing mathematics but in maximizing the use of students' personal experience in the everyday world and their everyday language. Students apply algebra daily in this course. This course challenges students to study, understand, and articulate the concepts of mechanics, matter, heat, sound, light, electricity, magnetism, and nuclear energy. (1.0 credit)

**S 10 Chemistry:** Students learn basic concepts of general inorganic and physical chemistry including the structure and nature of matter, the periodic table, formula naming, atomic structure, gas laws, kinetics, and solutions. Laboratory demonstrations and experiments help students understand and apply the principles of chemistry, as well as supply them with frequent practice in the scientific method. Prerequisite: Algebra 1 (1.0 credit)

**S 10 Honors Chemistry:** This is an accelerated chemistry course designed for students with strong skills in the science and math disciplines. The course covers the fundamental concepts of chemistry in greater breadth and depth, including stoichiometry, mole calculations, molecular shape, equilibriums, redox reactions, acid-base theory, and kinetics. Students acquire an excellent foundation for the SAT Subject Test in Chemistry and the AP Chemistry course. Concurrent enrollment in Algebra 2 or higher recommended. (1.0 credit)

**S 11 Biomedicine:** In this lab-based biology course, students study, understand, and articulate core biology topics, including biochemistry, cell and molecular biology, and genetics. In addition, students will apply their biology understanding to topics of human anatomy and physiology, including several of the major body systems, and medical technology, especially forensics. Lab experiences include dissections, microscopy, and forensic techniques, among others. Prerequisite: Prior or concurrent enrollment in Chemistry or Honors Chemistry recommended. (1.0 credit)

**S 11 Marine Biology:** In this lab-based biology course, students study, understand, and articulate core biology topics through the framework of marine biology. The course covers biochemistry, cell and molecular biology, genetics, evolution, and ecology while students concomitantly learn about marine organisms and ecosystems. Lab experiences include studies of seawater, development and physiology of marine life, and ocean ecology. This year-long class culminates with a series of off-campus ecological field studies to evaluate, and ultimately appreciate, the Salish Sea ecosystem. (1.0 credit)

**S 11 Advanced Placement Biology:** Topics covered include biochemistry, cell structure and function, cell division, cell signaling, molecular genetics, Mendelian genetics, evolution/origins, animal and plant physiology, and ecology. These topics are covered in significant depth and breadth with extensive emphasis placed on descriptive and experimental laboratory exercises. Students learn a variety of skills such as experiment design, data recording and interpretation, statistical analysis, and operation of technical equipment. The AP Biology course is equivalent to a two-semester introductory biology course usually taken by science students during their first year of college. Prerequisite: Chemistry or Honors Chemistry (1.0 credit)

**S 12 Advanced Placement Chemistry:** Topics covered include equilibrium, kinetics, thermodynamics and thermochemistry, atomic structure, molecular structure, electrochemistry, phases of matter, and solution behavior. These concepts are explained and tested in a laboratory setting using experiments aimed at expanding the understanding of the current model and also applying that understanding to new situations and predicting the results. Emphasis is placed on understanding how and why substances act in particular ways and modeling those actions and interactions, as well as understanding how to predict results using mathematical models. The AP Chemistry course is equivalent to a year-long college-level general chemistry course taken by most science students. Prerequisites: Chemistry or Honors Chemistry, also Algebra 2 (1.0 credit)

**S 12 Advanced Placement Physics 1:** This course is equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It also introduces electric circuits. Prerequisite: Algebra 2 (1.0 credit)

*Note:* Interested students may take the AP Physics C: Mechanics (with calculus) exam with teacher approval; requires independent study. Prerequisite: AP Calculus AB

**S 12 Engineering:** This full-year course will engage students in authentic engineering practices in a project-based learning (PBL) environment. Using curriculum developed by a team of University of Texas faculty at the Cockrell School of Engineering and NASA engineers, students explore the breadth of engineering fields, learn the narrative of engineering and develop engineering design skills and habits of mind. Students design products with users in mind (designing a flashlight) and learn how engineered solutions evolve over time (imaging timeline and pin-hole camera project), use data (Excel spreadsheets for designing coffee and safer buildings), design the products of our everyday lives (reverse engineering and product redesign project), use computation and programming skills to solve fun and important challenges (programming microcontrollers to play electronic music), and work in teams to solve complex, system-level design challenges (aerial imaging project). (1.0 credit)

## Senior Capstone Project

**Senior Capstone Project:** Bear Creek's Senior Capstone Project provides an opportunity for seniors to develop and pursue a challenging, meaningful, and self-directed project in an area of personal interest during the last three weeks of the spring semester. Each senior chooses a project that demonstrates a depth of investment and insight, exhibits a significant level of personal challenge, and advances his/her ability to articulate how his/her worldview has been challenged or changed by the project experience. Students develop their projects with a faculty mentor and chronicle their work and progress in a project journal. The Senior Capstone Project culminates with a presentation of the project to a panel of faculty and peers. (0.5 credits)



## Concurrent Credit Program

Since 2018, The Bear Creek School and Northwest University (NU) have partnered to offer concurrent college credit for select Bear Creek classes. See Concurrent Credit Program on school website for most the up-to-date list of courses available for concurrent credit.

The following courses were available for concurrent credit during the previous (2019 – 2020) school year. \*

AP English Language and Composition (Norris)  
Honors Enlightenment and American Literature (Summers)  
Philosophical Theology (formerly Modern Christian Thought and Practice) (Davison)  
Christianity and Contemporary Culture (formerly Worldview Capstone) (Davison)  
Strength Training (Miller)  
Health (Miller)  
AP Physics 1: Algebra-based (Graham)  
AP Chemistry (Bell)  
AP U.S. History (Wilson)  
AP European History (Sorensen)  
Graphic Design 1 and 2 (Plourde)

\* Each fall Northwest University will review and update the list of Bear Creek courses available for concurrent credit. Courses listed above may or may not be eligible in 2020 – 2021, while additional courses may be added. NU applications must be submitted, and registration fees paid in the fall.

## Advanced Placement® (AP) Program

Students at Bear Creek may challenge themselves in areas of particular aptitude and passion by enrolling in several Advanced Placement courses. AP courses are college-level courses taught by Bear Creek faculty with content guided by The College Board. AP courses culminate each May with a national examination in each subject area by which students may earn college credit based on their exam score (typically a 3 or higher).

Two defining elements of the AP program at Bear Creek are the scope of our AP offerings and the fact that enrollment is, essentially, open to all students. Bear Creek offers the following AP courses each year:

AP Calculus AB*	AP Language and Composition
AP Calculus BC*	AP Literature and Composition
AP Statistics*	AP European History
AP Biology*	AP U.S. History
AP Chemistry*	AP Music Theory*
AP Physics 1*	AP Computer Science A*

Additionally, students who are passionate about a subject not listed above may choose to study independently for any\*\* of the AP Exams offered by the College Board, e.g. AP Psychology, AP Macroeconomics, or AP Art History. Bear Creek will administer the AP Exam in May at the designated time. As usual, graduating seniors may submit their official AP Score Report to colleges to demonstrate mastery. Contact the Office of College and Academic Advising for more information.

Advanced Placement courses require personal discipline and independent study techniques. Students will experience an increased reading load and longer writing assignments in most AP classes. AP courses attract students who are academically motivated, personally invested, and diligent. They must be able to read perceptively and independently. Additionally, students need to be proficient in writing concise and clear essays. Students must earn at least a “B” in prior academic department coursework to qualify for AP course enrollment. See course descriptions for additional prerequisites.

Given the high commitment level and increased demand, course selection should be considered carefully. Students who succeed in AP courses generally do well in college as a result of the exposure to collegiate teaching and testing methodology and increased academic preparation. All AP courses are noted on the official Bear Creek transcript.

\* See course descriptions for prerequisites.

\*\* Except AP Chinese Language and Culture and AP Japanese Language and Culture exams which cannot be administered at Bear Creek.

## Course Planning Grid Worksheet

<b>Subject</b> <i>Required credits</i>	<b>Grade 9</b>	<b>Grade 10</b>	<b>Grade 11</b>	<b>Grade 12</b>
<b>English</b> <i>4.5 credits</i>	Honors Ancient Literature (1.0)	Honors Medieval and Renaissance Literature (1.0)	Rhetoric (0.5)	Honors Senior English <b>or</b> AP English Literature and Composition (1.0 each)
			Honors Enlightenment and American Literature <b>or</b> AP English Language and Composition (1.0 each)	
<b>History</b> <i>4.5 credits</i> <i>(includes 0.5 credits Washington State history and government)</i>	Honors Ancient and World History (1.0)	Honors European History <b>or</b> AP European History (1.0 each)	Honors U.S. History <b>or</b> AP U.S. History (1.0 each)	Art History (0.5)
				U.S. Government and Politics (0.5)
<b>Science</b> <i>3.0 credits</i>	Conceptual Physics (1.0)	Chemistry <b>or</b> Honors Chemistry (1.0 each)	Marine Biology, Biomedicine, <b>or</b> AP Biology (1.0 each)	Engineering, AP Physics 1 <b>or</b> AP Chemistry (1.0 each)
<b>Math</b> <i>3.0 credits</i>	Geometry, Algebra 2, or Honors Precalculus (1.0 each)	Geometry, Algebra 2, Precalculus, Honors Precalculus, AP Statistics, Calculus, <b>or</b> AP Calculus AB (1.0 each)	Algebra 2, Precalculus, Honors Precalculus, Calculus, AP Statistics, AP Calculus AB <b>or</b> AP Calculus BC (1.0 each)	Precalculus, Honors Precalculus, Calculus, AP Calculus AB, AP Calculus BC, Multivariable Calculus <b>or</b> AP Statistics (1.0 each)
<b>Christian Studies</b> <i>3.0 credits</i>	Historical Theology (0.5)	Systematic Theology (0.5)	Philosophical Theology (0.5)	Christianity and Contemporary Culture (1.0)
		Logic (0.5)		
<b>Languages</b> <i>3.0 credits</i>	French, Spanish, <b>or</b> Latin	French, Spanish, <b>or</b> Latin	French, Spanish, <b>or</b> Latin	French, Spanish, <b>or</b> Latin
	Level ____	Level ____	Level ____	Level ____
<b>Health</b> <i>0.5 credits</i>	Health (0.5)			
<b>Physical Education</b> <i>1.5 credits</i> Ski & Snowboard Program (0.25) <b>or</b> BC sports team (0.5)	F			
	W			
	S			
<b>Fine Arts</b> <i>1.0 credits</i>	S1			
	S2			
<b>Additional</b> <i>1.5 credits</i>	S1			
	S2			
<b>Senior Capstone</b> <i>0.5 credits</i>	N/A	N/A	N/A	Senior Capstone Project (0.5)