

2021 - 2022

Vail Christian High School

Course Registration and Curriculum Guide



Home of the Saints

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Table of Contents

Mission Statement.....	3
Academic Profile with Graduation Requirements.....	3
Grade and Weighting Policy.....	6
Course Selection Guidelines.....	6
Course Offerings and Descriptions.....	7
English.....	7
Foreign Language.....	8
Math.....	9
Computer Science and Technology.....	11
Science.....	12
Engineering.....	14
PLTW.....	15
Social Studies.....	16
Theology.....	17
Visual Arts.....	18
Performing Arts.....	19
Physical Education.....	19
Electives.....	20
Student Success Center.....	21

MISSION STATEMENT

Equipping mind, body, and spirit for lives of purpose, service, and leadership.

VALUES

Our school's values succinctly express what's most important to us.

- **Faith** ~ Trust in God centered in Jesus Christ
- **Excellence** ~ The pursuit of becoming better than we once were, never ordinary but *extra-ordinary*
- **Character** ~ Qualities such as love, kindness, respect and integrity
- **Community** ~ A Vail Christian family known for its inward and outward expression of love

VISION STATEMENT

We have an exceptional faculty, a robust student body, and institutional strength. Our students and graduates are known for their Christian commitment and character, entrepreneurial spirit, creativity, and ability to solve complex, real-world problems. Operating within a Christian atmosphere based on love and respect, we achieve our vision through a laser focus on experiential learning, initiatives that connect local and global resources, and a highly-customized education to best optimize each student's full potential.

ACADEMIC PROFILE

Curriculum

The academic program at Vail Christian High School is a traditional semester schedule with 3.5 credits per semester as the preferred course load. The following shows graduation requirements (25.5 total credits) and course offerings by grade level. Complete descriptions of each course can be found starting on page 6.

<u>Graduation Requirements:</u>	<u>Courses Offered:</u>	<u>Credits:</u>	<u>Grade Level:</u>
English (4)	Pre-AP English 1	1.0	9
	Pre-AP English 2	1.0	10
	AP/DE English Language and Composition		
	DE Literature	1.0	11/12
	AP English Literature and Composition	1.0	11/12

Graduation

<u>Requirements:</u>	<u>Courses Offered:</u>	<u>Credits:</u>	<u>Grade Level:</u>
Math (4)	Algebra 1	1.0	9
	Algebra 1 Advanced	1.0	9
	Geometry	1.0	9/10
	Algebra 2	1.0	9/10/11
	Pre-Calculus	1.0	10/11/12
	College Algebra	1.0	10/11/12
	AP Calculus AB/BC	1.0	11/12
	AP/DE Statistics	1.0	11/12
Science (3 or 4) and Engineering	Biology (Required)	1.0	9
	Chemistry	1.0	10
	Conceptual Physics	1.0	11
	AP Environmental Science	1.0	12
	AP Chemistry	1.0	11/12
	AP Biology	1.0	11/12
	AP Physics	1.0	11/12
	Robotics	.5	ALL
	PLTW Human Body Systems(DE)	1.0	11/12
	PLTW Introduction to Engineering (DE)	1.0	9/10/11
	PLTW Principles of Engineering (DE)	1.0	10/11/12
Foreign Language (2)	Novice Spanish	1.0	9/10
	Intermediate Spanish	1.0	9/10/11
	Advanced Spanish	1.0	11/12
	AP Spanish	1.0	11/12
Social Studies (3.5)	Pre-AP World History and Geography	1.0	9
	AP World History	1.0	10
	AP U.S. History	1.0	11
	AP/DE Macro Economics	.5	11/12
	DE American Government (Required)	.5	11/12
Physical Education (1)	Performance P.E.	0.5	All
Fine Arts (1)	Theater	.5	All
	Vocal Ensemble	.5	All
	Studio Art I & II	.5	All
	AP Studio Art	1.0	11/12
	Worship Arts I/II	.5	All

Graduation

<u>Requirements:</u>	<u>Courses Offered:</u>	<u>Credits:</u>	<u>Grade Level:</u>
Technology (Elective Credits)	AP Computer Science Principles	1.0	All
	AP Computer Science A	1.0	10,11,12
	Digital Media I/II	.5	All
	PLTW - Cybersecurity	.5	10,11,12
Theology (2)	Cornerstone	.5	
	Life and Teachings of Jesus	.5	10
	Ethics and Social Justice	.5	11
	Capstone	.5	12
Electives (4)	Resource (Student Success Center)	.25	All
	Entrepreneurship	.5	10,11,12
	Speech and Communications	.5	9,10
	Personal Financial Management	.5	10,11/12
	College and Career Planning 11/12	.25	11/12
	Teacher's Assistant	.5	11,12

Total Required Credits: 25.5

These graduation requirements are only minimum standards for graduation. We encourage students to exceed these standards in preparing for colleges appropriate to their academic interests, and most students do so. Students are encouraged to plan for higher education and to take an appropriate range of courses. More competitive colleges and universities expect students to take four years each of math, English, science, foreign language, and social studies.

HIGHER EDUCATION REQUIREMENTS

The Colorado Commission on Higher Education has established requirements for all students planning to enter any of the 14 Colorado, public four-year institutions. These requirements are designed to ensure success in college.

	<u>Selective Colleges</u>	<u>Highly Selective Colleges</u>
English	4	4
Mathematics (Algebra 1 and Higher)	4	4
Social Studies (to include .5 Government)	3	3-4
Science (to include Biology)	3	4
Years of same foreign language	2	3-4
Academics Electives	2	2

GRADE AND WEIGHTING POLICY

In order to more clearly communicate how we evaluate students and determine term grades, Vail Christian High School uses the following system:

<u>Percentage</u>	<u>Grade</u>	<u>GPA Value</u>
93-100	A	4.00
90-92	A-	3.67
87-89	B+	3.33
83-86	B	3.00
80-82	B-	2.67
77-79	C+	2.33
73-76	C	2.00
70-72	C-	1.67
67-69	D+	1.33
63-66	D	1.00
60-62	D-	0.67
<60	F	0.00

Note: Dual Enrollment (DE) classes through Colorado Christian University and University of Colorado and Advanced Placement classes are “weighted” for purposes of calculating GPA. (A=5, B=4, etc.) NOTE: Excessive absences could result in the loss of AP/weighted Credit.

*Students registering for AP classes are required to take the AP exam for each class in May. There is an additional \$95.00 fee for each AP exam.

COURSE SELECTION AND REGISTRATION GUIDELINES

Students will be asked to complete Course Registration Forms in early spring for the upcoming school year. The Director of College Counseling and classroom teachers will give students information about course offerings and guidance on selecting appropriate courses. Students should discuss their course selections with their parents and return the completed Course Registration Form with their parents’ endorsement as soon as possible. Scheduling conflicts or full enrollment in elective courses may necessitate changes.

Course Load

Students must register for the equivalent of a **minimum** of five credits per year. The Director of College Counseling or Principal must approve any request to enroll in more than **four** AP courses. After appropriate discussion with the Director of College Counseling or Principal, students may drop or add courses without penalty within the first two weeks from the beginning of the course. After the first two weeks and up until mid-semester, students may change courses only with the approval of the teacher and the Director of College Counseling or Principal. Changes in placement to a more appropriate level, as in mathematics and foreign language, or changes recommended by a student’s teacher will be considered separately by the Principal and classroom teacher.

COURSE OFFERINGS AND DESCRIPTIONS

As the following descriptions indicate, Vail Christian High School offers a wide array of courses in each of the major academic disciplines, as well as many others that students may elect to complement particular interests.

ENGLISH

Language Arts is the study of writing, grammar, and literature from the perspective of a Biblical world view. Students will gain understanding of style, structure, and meaning of literature through reading and analysis of short stories, poetry, novels, and drama. VCHS graduates will be able to communicate effectively, both in writing and speaking. They will be equipped to select literature, movies, and drama for their personal enjoyment that will enhance their Christian walk throughout their lives.

Pre-AP English 1 (1.0 credit; required 9th grade)

English 1 is a gateway course for future Advanced Placement English courses. This course enhances and expands reading and writing skills, moving toward more complex texts and greater emphasis on textual analysis. Students will refine grammatical skills by honing usage of phrases and clauses in written and oral form.

Pre-AP English 2 (1.0 credit; required 10th grade)

This course continues to prepare students for AP courses in the Junior and Senior year. The reading and writing are frequent and challenging. The course requires independent thinking and analysis, as well as focused discussion and composition. The first semester of the course focuses on literature from around the world – with an emphasis on common archetypes. The second semester focuses on American classics, with an emphasis on understanding themes found in postmodern thought. Students will prepare for the grammar and writing sections of standardized college entrance exams.

AP English Language/DE Composition (1.0 credit) - Junior year

This course examines the Art of Rhetoric. In order to evaluate arguments and communicate effectively, students analyze rhetorical devices and employ rhetorical tactics. The class prepares students to take the AP English Language exam in May or to qualify for Dual Enrollment credit from Colorado Christian University. This course is designed to help students:

- Analyze and interpret samples of good writing.
- Identify and explain an author's use of rhetorical strategies and techniques
- Create and sustain arguments based on readings, research and personal experience
- Produce expository, analytical and argumentative compositions that introduce a complex thesis and develop the thesis using primary and secondary sources
- Evaluate arguments based on principles of logic
- Defend, challenge and qualify arguments of various time periods

AP/DE English Literature (1.0 credit) - Senior year

This course is designed to teach literary theory and literary analysis of imaginative texts. The class prepares students to take the AP Literature and Composition exam in May or to qualify for Dual Enrollment credit from Colorado Christian University. This course is designed to help students:

- Polish skills of close reading in order to understand author's intent
- Understand terms for - and uses of – literary devices
- Write multiple essays analyzing prose, drama and poetry
- Discuss imaginative literature using collegiate diction
- Prove independent analysis using specific examples from multiple texts

- Apply several methods of literary criticism to various texts.
- Understand a work's complexity, to absorb richness of meaning, and to analyze how meaning is embodied in literary form

FOREIGN LANGUAGE

The Foreign Language Department acknowledges God's purpose in creating language as a way to communicate with both Him and humanity. Through language, God has given us the means of understanding His love so we may express that love to others (Matthew 28:19-20). The gift of language gives us understanding of different cultures, thus instilling a respect for the diversity of God's kingdom. The primary academic goal of the Foreign Language Department is to assist students in developing both oral and written proficiency in a target language enabling them to communicate through reading and writing.

Vail Christian High School Scope and Sequence for Foreign Language Learners

Vail Christian Spanish language class titles changed beginning with the 2019-2020 school year. Students are initially placed in a main level and then based on the proficiency level attained each semester their transcript will include the main level as well as a sublevel. This allows for students to develop proficiency on a vertical level and/or a horizontal level. For example, as a freshman Student 1 may begin the school year as a Novice low (first time language learner) and finish as a Novice Mid. This student would begin his/her sophomore year as a Novice Mid and finish as a Novice High. Student 2 may begin as a Novice low and progress through Novice high. The following year this student would move into the Intermediate level beginning with low. This addresses the desire of the foreign language department for students to develop strong levels of proficiency rather than pass a class to move to the next level.

LEVELS

Developed from the Federal Government's ILR scale by the American Council on the Teaching of Foreign Languages, the ACTFL proficiency scale has four main levels:

- Novice
- Intermediate
- Advanced
- Superior

The first three levels are each subdivided into three sublevels

- Low
- Mid
- High

The ACTFL scale provides a great deal of definition, especially at the lower levels of proficiency usually achieved in foreign language learning. It is widely used in many arenas, but particularly in academia.

HOW

Language learners should develop proficiency in the following four Standards:

1. Communication: Communicate effectively in more than one language in order to function in a variety of situations and for multiple purposes.
 1. Reading in Target language
 2. Writing in Target language
 3. Comprehending Spoken Target language
 4. Speaking in Target language
2. Cultures - Intercultural Communication: Interact with cultural competence and understanding.
3. Connections: Connect with other disciplines and acquire information and diverse perspectives in order to use the language to function in academic and career-related situations.
4. Comparisons: Develop insight into the nature of language and culture in order to interact with cultural competence.

WHY

The ability to communicate with respect and cultural understanding in more than one language is an essential element of global competence. This competence is developed and demonstrated by investigating the world, recognizing and weighing perspectives, acquiring and applying disciplinary and interdisciplinary knowledge, communicating ideas, and taking action. Global competence is fundamental to the experience of learning languages whether in classrooms, through virtual connections, or via everyday experiences. Language learning contributes an important means to communicate and interact in order to participate in multilingual communities at home and around the world. This interaction develops the disposition to explore the perspectives behind the products and practices of a culture and to value such intercultural experiences. Actfl.org website

MATHEMATICS

The VCHS Math Department prepares students to understand math models that will help them think critically in and out of the classroom. Within our Christian environment, the mathematics instruction cultivates an appreciation of the order of the universe and promotes the Christian values of respect and cooperation.

The math curriculum focuses on algebra and geometry, as these are the fundamental prerequisites for advanced mathematics studies. The department faculty strives to assist every student to become fluent in the language of algebra and geometry, develop confidence in performing these equations, and achieve a lasting understanding of fundamental math concepts.

Algebra 1 (1.0 credit)

Algebra 1 is designed for students who have mastered the fundamentals of arithmetic and are ready to move into more advanced topics. The content of the course includes an introduction to the study of the language of algebra, linear functions, linear systems, quadratic functions, radical functions, exponential functions and rational functions.

Algebra 1-Advanced (1.0 credit)

Prerequisite: Math diagnostic exam results determine placement in this course.

Algebra 1 advanced covers an accelerated Algebra 1 curriculum with an emphasis on higher level critical thinking skills. The content of this course includes an introduction to the study of the language of algebra, linear functions, linear systems, quadratic functions, radical functions, exponential functions and rational functions. Instruction is focused on the application of algebra to realistic situations and use of current technology.

Algebra 2 (1.0 credit)

Prerequisite: Successful completion of Algebra 1 or Algebra 1 Advanced.

Algebra 2 expands on the topics and concepts of Algebra 1. New topics include polynomial, exponential, and logarithmic functions. Students develop problem-solving skills and are challenged to think critically in preparation for advanced mathematical study in upper level courses. In addition to numerical, algebraic and graphical analysis using graphing calculator technology, emphasis is also placed on written expression in the form of algebraic communication that documents a logical thought process and support for a correct response.

Geometry (1.0 credit)

Prerequisite: Successful completion of Algebra 1 or enrollment in Algebra 1 Advanced or Algebra 2.

This course is a study of geometric figures in two and three dimensions. It is designed to increase a student's understanding of spatial relations. Emphasis is also placed upon applying algebra to geometric problem solving, and applying the basic terminology and concepts of geometry in a logical and organized manner including formal proofs.

Pre-Calculus (1.0 credit)

Prerequisite: Successful completion of Algebra 2 and approval from current math instructor

Pre-Calculus is designed to increase students' knowledge of mathematics beyond Algebra 2. It provides the background necessary to succeed in AP Calculus AB. This course emphasizes the fundamentals of functions through the study of polynomial, rational, power, exponential, logarithmic, trigonometric, and circular functions. Students thoroughly explore composition, inverses, and transformations of all functions.

College Algebra (1.0 credit)

Prerequisite: Successful completion of Algebra 2 and approval from current math instructor

College Algebra strengthens the fundamental concepts of Algebra 2, preparing students for college entrance and placement tests. Topics including linear, quadratic, polynomial, exponential, logarithmic, and trigonometric functions are explored in more detail and application. This course is recommended for students who may need a stronger algebra foundation before moving on to higher-level mathematics courses.

AP/DE Statistics (1.0 credit)

Prerequisite: Successful completion of pre-calculus and approval from current math instructor

The AP Statistics course is equivalent to an introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding. This class prepares students to take the AP Statistics exam in May or qualify for DE credit from Colorado Christian University.

AP Calculus AB (1.0 credit)

Prerequisite: Successful completion of pre-calculus and approval of current math instructor.

This is a rigorous course in a full year of work in calculus and related topics comparable to Calculus I courses in college and prepares students for the Advanced Placement AB examination. This AP course covers concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problems, experiment, interpret results, and support conclusions. This class prepares students to take the AP Calculus AB test in May.

AP Calculus BC (1.0 credit)

Prerequisite: Successful completion of AP Calculus AB and approval of current math teacher

AP Calculus BC extends the content learned in AB to different types of equations (polar, parametric, vector-valued) and new topics (such as Euler's method, integration by parts, partial fraction decomposition, and improper integrals), and introduces the topic of sequences and series. The AP course covers topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. The course teaches students to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations. Students learn how to use technology to help solve problem This class prepares students to take the AP Calculus BC test in May.

COMPUTER SCIENCE and TECHNOLOGY

Digital Media - TV Production and Film Making (1.0 credit)

This course will introduce students to the basic principles, techniques and equipment used in visual storytelling in both television production and digital filmmaking. Beginning instruction is offered in story origination, script writing, camera operation, capturing audio, editing, planning and organizing non-fictional short subject projects, and informational and news segment production. In this project-based course, we're going to create and produce story segments, content, and programming as both individual producers and in project teams. Program segments will be created for public viewing on the VCHS website, our television production class website and on class and school social media outlets.

AP Computer Science Principles (1.0 credit)

Prerequisite: Successful completion of Algebra 1. The AP Computer Science Principles course is designed to be equivalent to a first- semester introductory college computing course. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based on their interests. Students will also develop effective communication and collaboration skills by working individually and collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and the world. This class prepares students to take the AP Computer Science Principles exam in May.

AP Computer Science A (1.0 credit)

Prerequisite: Successful completion of AP Computer Science Principles

Computer Science A (CSA) builds on the basic skills learned in AP Computer Science Principles (CSP) to teach students Java and authentic Android™ app development. Students in this course continue to hone their communication and collaboration skills while learning to use a variety of tools. The primary goal of the course is to create independent-thinking app developers: every unit in this course builds on students' prior knowledge and skills until they are able to complete an app development cycle independently from the ground up. This class prepares students to take the AP Computer Science A exam in May.

PLTW - Cybersecurity (Elective, 1.0 credit)

Cybersecurity introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy. Nationally, computational resources are vulnerable and frequently attacked; in Cybersecurity, students solve problems by understanding and closing these vulnerabilities. This course raises students' knowledge of and commitment to ethical computing behavior. It also aims to develop students' skills as consumers, friends, citizens, and employees who can effectively contribute to communities with a dependable cyber-infrastructure that moves and processes information safely.

SCIENCE

The Science Department focuses on teaching students to think critically, to practice scientific thought, and to examine God's world around them. It is this department's goal to prepare students for success in college science programs and to train them to give an answer for the hope that lies within them as followers of Christ.

Biology (1.0 credit; graduation requirement)

This course is devoted to the study of living things and their processes. Throughout the year this course provides an opportunity for students to develop scientific process skills, laboratory techniques, an understanding of the fundamental principles of living organisms, and higher order thinking skills through scientific case study analysis. Students will explore biological science as a process, cell structure and function, genetics and heredity, evolution and classification, diversity of living organisms and their ecological roles, and a study of the overall structure and function of plants and animals.

Chemistry (1.0 credit)

Chemistry is the study of the composition, structure, properties and change of matter. The approach in this course is to start with a simple model of the atom and then evolve the model as the need for a better one arises. In each of the units, the following sequence will be utilized: examine phenomena, describe patterns observed regarding the phenomena, and build a model to help explain the phenomena. Lab activities will promote technical lab competence, utilize the scientific process of research and reporting, as well as teach and reinforce scientific concepts.

Conceptual Physics (1.0 credit)

This science course utilizes the modeling process to introduce students to the principles of physics. The modeling process seeks to engage students in understanding the physical world by constructing and using scientific models to describe, to explain, and to predict physical phenomena. It will provide students with basic conceptual tools for modeling physical objects and processes, especially mathematical, graphical and diagrammatic representations. Topics to be covered include Waves,

Magnetism, Electricity, Light, Optics, Kinematics, Force, Newton's Laws, Momentum and Impulse. Individual and collaborative experimentation will be a large part of this course.

AP Biology (1.0 credit)

Prerequisite: Must have a "B" or higher in Biology and Chemistry.

AP Biology is a year-long introductory college-level biology course designed for high school students as an opportunity to earn AP credit on their high school transcript, as well as placement credit for an introductory college-level science course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes — energy and communication, genetics, information transfer, ecology, and interactions.

AP Chemistry (1.0 credit)

Prerequisite: Must have a "B" or higher in Biology and Chemistry.

The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations as they explore content such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, equilibrium, and electrochemistry.

AP Physics 1 (1.0 credit)

Prerequisite: Successful completion of Geometry and Algebra II

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through classroom study, in-class activity and hands-on, inquiry-based investigations as they explore these topics: kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion, electric charge and electric force, DC circuits, and mechanical waves and sound. Prior coursework in Physics is not required - this class may be taken as a first OR second year course in Physics.

AP Environmental Science (1.0 credit)

Prerequisites: Biology and Chemistry

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Environmental Science is interdisciplinary; it embraces a wide variety of topics from different areas of study, including biology, ecology, chemistry, geology, geography, and sociology.

PLTW - Human Body Systems (DE) (1.0 credit)

Prerequisite: Must have a "B" or higher in Biology and Chemistry.

In the Human Body Systems (HBS) course, students examine the interactions of body systems as they explore identity, communication, power, movement, protection, and homeostasis. Students design

experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through interesting real world cases, and often play the role of biomedical professionals to solve medical mysteries. Students practice problem solving with structured activities and progress to open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills. This class prepares students to qualify for Dual Enrollment credit from University of Colorado - Colorado Springs.

ENGINEERING

Robotics (.5 credit)

Robotics is an elective pass/fail course for those wishing to invest time in developing and building a robot with a team of students. The robot will be used to compete in the 2022 VEX Robotics Competition held in the early part of second semester. This class is student self-driven and the focus is on designing, building, coding and iteration of the robot.

PLTW - Introduction to Engineering Design (DE) (1.0 credit) *Prerequisite: Must have a grade of "B" or higher in grade 8 math and science, and be enrolled in College Prep math and science courses during the 9th grade year.* IED is an introductory course that develops student problem solving skills, with emphasis placed on the development of three-dimensional solid models. Students will learn a problem-solving design process and how it is used in industry to manufacture a product. They will work from sketching simple geometric shapes to applying engineering design computer software. Students will develop skill in technical representation and documentation of design solutions according to accepted technical standards, and they will use current 3D design and modeling software to represent and communicate solutions. The techniques learned and equipment used is state of the art and are currently being used by engineers throughout the United States. This is a project-based learning class that will prepare students for more advanced engineering design concepts and STEM careers. This class prepares students to qualify for Dual Enrollment credit from University of Colorado - Colorado Springs.

PLTW - Principles of Engineering (DE) (1.0 credit) Principles of Engineering (POE) is a foundation course of the high school engineering pathway. This survey course exposes students to some of the major concepts that they will encounter in a postsecondary engineering course of study. Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of materials and structures, automation, and kinematics. The course applies and concurrently develops secondary level knowledge and skills in mathematics, science, and technology. This class prepares students to qualify for Dual Enrollment credit from University of Colorado - Colorado Springs.



VCHS adopted Project Lead The Way’s (PLTW) high school STEM courses in the 2017-2018 school year and beyond. PLTW is a nonprofit organization that provides transformative learning experiences for K-12 students and teachers, and VCHS joins more than 9,000 schools across the U.S. in offering PLTW programs to students. This new program will allow Vail Christian High School to offer new STEM courses in Engineering, Biomedical Science and Computer Science pathways. These courses will be offered as Dual Enrollment classes with college credits through University of Colorado Colorado Springs (UCCS).

As a PLTW school, Vail Christian High School is part of a community of K-12 schools, colleges, and universities, as well as corporate and philanthropic partners across the country united around a passion for providing students with inspiring, engaging, and empowering learning opportunities in STEM education and careers. In addition to earning college credit through UCCS, PLTW students are afforded a variety of opportunities including scholarships, preferred admission at colleges and universities, internships, industry connections, and avenues to highlight achievements.

AP + PLTW College Board Recognition/Certificate

To get students ready for the global workforce, the College Board and Project Lead The Way partner to encourage student participation in STEM courses and build students' interest in STEM degrees and careers in 3 different pathways:

Biomedical Science, Computer Science, or Engineering

To earn the recognition, the student must satisfactorily complete three courses in the pathway – one AP course; one PLTW course; and a third course, either AP or PLTW – and earn a qualifying score of 3 or higher on the AP Exam(s) and a score of Proficient or higher on the PLTW End of Course (EoC) assessment(s).

AP + PLTW Certificate - Pathway Courses Menu

Level	Engineering	Biomedical Science	Computer Science
College-AP Courses	AP Biology AP Calculus AB AP Calculus BC AP Chemistry AP Computer Science Principles AP Environmental Science AP Physics 1 AP Statistics	AP Biology AP Chemistry	AP Computer Science Principles AP Computer Science A
Career - PLTW Courses	Introduction to Engineering Design Principles of Engineering	Human Body Systems	Cybersecurity

SOCIAL STUDIES

The Social Studies Department focuses on teaching students to think critically and to produce citizen-servants, dedicated to lives of Christian leadership; grounded in the fundamentals of historical scholarship.

Pre-AP World History and Geography (1.0 credit)

Pre-AP World History and Geography focuses deeply on the concepts and skills that have maximum value for high school, college, careers, and civic life. The course builds students' essential skills and confidence and helps to prepare them for a range of AP history and social science coursework during high school, including AP World History. The learning model is that of a disciplinary apprenticeship, with students using the tools of the historian and geographer as sources, data, and analytical reading and writing take center stage in the classroom. In this course, students learn that historians and geographers are investigators intent on using the tools of their disciplines to uncover new evidence about the world and its inhabitants.

AP World History: Modern (1.0 credit)

AP World History is designed to be the equivalent of a two-semester introductory college or university world history course. In AP World History: Modern, students investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. This class prepares students to take the AP World History exam in May or to qualify for DE credit from Colorado Christian University.

AP U.S. History (1.0 credit)

AP United States History is designed to be the equivalent of a two-semester introductory college or university U.S. history course. In AP U.S. History students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course also provides seven themes that students explore throughout the course in order to make connections among historical developments in different times and places: American and national identity; migration and settlement; politics and power; work, exchange, and technology; America in the world; geography and the environment; and culture and society. This class prepares students to take the AP U.S. History exam in May.

DE American Government (.5 credit)

DE American Government introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess causes and consequences of political events, and interpret data to develop evidence-based arguments. This class prepares students to qualify for dual credit from Colorado Christian University.

AP Macroeconomics/ DE Foundations in Economics (.5 credit)

AP Macroeconomics is an introductory college-level course that focuses on the principles that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination; it also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts. This class prepares students to take the AP Macroeconomics exam in May or to qualify for Dual Enrollment credit from Colorado Christian University

THEOLOGY

Cornerstone (.5 credit; required 9th grade)

With a course theme based on character, this course is uniquely designed to prepare students for success in high school. Students will learn more about VCHS and all it offers, learn more about themselves, build relationships with classmates and discuss topics of interest and importance for today's teens. With all of this, Scripture will be explored with the goal to discover life application.

Life and Teachings of Jesus (.5 credit; required 10th grade)

So who is Jesus? With a course theme based on love and respect, we will examine the life of Jesus through several portraits including Jesus as: incarnation of God, miracle worker, initiator of the Kingdom of God, teacher, Savior and Resurrected King. Students will learn more about the gospels, Old Testament prophecy and Jesus' historical background.

Ethics and Social Justice (.5 credit; required 11th grade)

With a course theme based on stewardship and courage, the first part of the semester will examine topics of social ethics including morality, building our own conscience, relationships in community, love, family, sex and gender identification, feminism, dilemmas in medical ethics, addictions, and suicide. The second part of the semester we will examine social justice centered on God's call to "act justly and love mercy." Topics include the politics of Jesus, world poverty and income inequality, war and genocide, racism, healthcare, homelessness, capital punishment, the environment. The class will be an opportunity for the students to examine issues from all angles and to develop personal beliefs after analysis and discussion. Teaching methods will include small and large group discussion, videos, role plays, presentations and debates.

Capstone (.5 credit; required 12th grade)

With a course theme based on exploration and discovery, this discussion based class will challenge students to wrestle with what it means to be persons of faith in this world and encouraged and guided in the process of making, defining, and defending their own decisions about faith issues. Possible topics could include existence of God, problem of evil, deity of Jesus, historicity of the Jesus' resurrection, miracles, and authority and reliability of Scriptures. The course will also encourage students to explore and discover where they are on their spiritual pilgrimage as well as their purpose and life calling. It will also deepen their self-awareness as they prepare and transition from high school

to college. The course will culminate with a senior project – the capstone of their high school experience.

FINE ARTS

The Fine Arts Department focuses on helping students discover their God-given gifts and talents (Ephesians 2:10) and to develop these so they can use this creative expression to impact the world for Christ and be a joy to their community. Emphasis is placed on self-discipline as a requirement for excellence as students learn to showcase their artistic abilities.

Visual Arts

Studio Art I (Elective, .5 credit)

The primary goal of this 3D and 2D course is the development of an awareness and appreciation of the arts, with a focus on the Basic Elements of Art and Principles of Design. Students are introduced to the materials, techniques, concepts, and processes essential to understanding the visual arts, and the role of the artist, through a series of projects, art history exploration, class critiques, videos, slide presentations, and various kinds of method studies.

Studio Art II (Elective, .5 credit; prerequisite for AP Studio Art)

This course provides students with a foundation in studio art, art history, and contemporary art. Students will examine theories of art while experimenting with a variety of materials. Throughout the year, the class will explore numerous mediums including, but not limited to, drawing, painting, sculpture, assemblage, block printing, photography, collages, mixed media, and digital studio. The course encourages students to think creatively, conceptualize, and practice craftsmanship. Critiques are a vital component of the course. By balancing the study of art history, studio practice, and art criticism, students develop various approaches to art-making and gain insight into the art world. A student showcase event will take place at the conclusion of the semester.

AP Studio Art (Elective, 1.0 credit)

Prerequisite: Must have a “B” or higher in Studio Art II and teacher recommendation

The AP Program offers three studio art courses and portfolios: 2-Dimensional Design, 3-Dimensional Design, and Drawing. The AP Studio Art portfolios are designed for students who are seriously interested in the practical experience of art. Students submit portfolios for evaluation at the end of the school year. The three portfolios correspond to the most common college foundation courses. Students may choose to submit any or all of the Drawing, 2-Dimensional Design, or 3-Dimensional design portfolios. Students create a portfolio of work to demonstrate the artistic skills and ideas they have developed, refined, and applied over the course of the year to produce visual compositions.

Performing Arts

Vocal Music Ensemble (Elective, .5 credit)

This course is a non-audition choir that sings a wide variety of repertoire. Classical, folk, pop, and holiday music is studied throughout the year. Music theory is studied weekly, and technical vocal work daily. There is at least one major performance each semester. Performances are required in order to receive credit for this course.

Worship Arts - (Elective, .5 credit)

This course incorporates all aspects of performing and producing music within a professional praise and worship team including:

- 48 k Digital Sound Production
- Stage Production
- Intelligent lighting production
- CG computer graphics
- 4K Camera & Video production
- Video Switcher & Broadcast production
- Multimedia production
- Music theory instruction
- Pro level Instrument instruction: Drums, bass, keyboard, guitars, & other instruments
- Vocal & performance coaching
- Worship & Leadership coaching
- Song structure / arrangements study
- Service planning and team building
- Speaker production
- Songwriting
- Recording & Editing with Logic Pro

Theater (Elective, .5 credit)

This course highlights acting, singing, dancing and script writing. Fall semester is comprised of developing acting, stage skills and script writing. Singing and dancing is minimal. Spring Semester highlights a Broadway musical production. Both semesters, students are highlighted in performing their strengths while encouraged to grow in all the areas of performance.

PHYSICAL EDUCATION

Performance PE (.5 credit)

This class is geared towards athletes interested in developing and enhancing their God given athletic talent. The class will incorporate various activities to develop the student's speed, agility, strength, power, and other sport specific skills. Special emphasis will be placed on injury prevention.

**Students earn .25 PE credits for each sport of which they compete for an entire season*

ELECTIVES

Entrepreneurship (.5 credit)

The Entrepreneurship course is designed to serve as an introduction to both the business and personal aspects of an entrepreneurial life. Students will explore what it means to not only run a business, but also to live a meaningful life while doing so. Students will practice business basics in finance, operations, sales, and leadership, while also wrestling with real-life struggles in ethics, integrity, adversity, relationships, and personal life meaning. Students will do so using the Socratic and case methods to maximize learning from both the preparatory materials and peers. The course will conclude with students applying their new skills to creating a business plan for their own potential company.

Personal Finance Management (.5 credit)

This course will help students develop guidelines for effectively managing their money, the one thing that every student must learn about as they prepare for college and life after learning. Savings, investments, financial discipline and goal setting for college planning and life, will be learned through an analytical and practical process. Credit and debt, budgeting, bargain shopping, college costs, risk management, investing, and consumer awareness will be some essential units covered. In addition, students will learn to utilize Excel and to understand how to read and understand paychecks as well as checking accounts. A Christian perspective, including being a wise steward of God's money, will be central to learning about debt, credit and money management.

Speech and Communications (.5 credit)

This course is designed as a course of participation. We will look at three modes of Communication in order to learn and practice best methods for each: Speech, Interview and Presentation. Students will be assigned projects for each of these modes which will move from in-class and peer critiques, to school and community involvement.

College and Career Prep 11 (.25 credit)

This course offers a dedicated time to work through and understand the many components of the college and career process in preparation for senior year. Resources and time will be provided to explore and understand aptitudes, assessments, preferences, testing and interests. Students will address critical topics related to developing success skills, exploring career options, testing, developing plans for shadows and summer activities that will provide further exposure and insights. This information will then be used to research and build college and career lists. During the final quarter, students will work through college applications, and work on college essay(s). The course sets students up to move into the College and Career Prep 12 course which will solidify applications, essays, financial aid, scholarships, and post-secondary plans.

College and Career Prep 12 (.25 credit)

In this class, seniors will identify college and career objectives and finalize key components of the college application process including: the high school resume, primary and supplementary applications, essays, preparing for interviews and completing a portfolio for all application and scholarship deadlines. Students will participate in college admission events via zoom including meeting with college professors, admissions representatives and financial aid professionals sharing information on admissions, fields of study, financial aid and scholarships. In addition to preparing the administrative components for college and career opportunities, a primary objective of this class is for students know themselves and their options and to make informed decisions about their future educational and/or career options.

STUDENT SUCCESS CENTER

Vail Christian High School offers a Student Success Center for students who may require extra academic support during their high school years. This on-campus program is designed to support and manage individualized educational plans for students with documentation of either a Federal 504 Accommodation plan or a PSSP / ISP (Private School Service Plan/Individualized Services Plan). In addition, our center supports other enrolled students who may need assistance with executive functions such as: organizational skills, time management, study and writing skills, test-taking strategies, or extended testing time.

Listed below are the benefits of enrollment that are provided by the Resource Director in the Student Success Center:

1. Work with individual students or small groups of students to reinforce learning of materials or skills initially introduced and outlined by teaching faculty within specific disciplines.
2. Assist the certified staff in devising special strategies for reinforcing learning materials and skills based on a sympathetic understanding of individual students, their needs, interests, and abilities.
3. Attend regularly scheduled Faculty & Administrative team meetings by class (Freshmen, Sophomore, Junior, Senior). Director serves as Liaison with faculty and as an Advocate for students enrolled in the Student Success Center in order to play an integral part in meeting the academic and emotional needs of each student.
4. Monitor work, assist in correction of work/exams, and supervise curriculum-based testing or makeup work as assigned by the teaching faculty.
6. Assist teaching faculty in proctoring examinations as necessary and directed by Federal 504 accommodation plans or modification plans within the district PSSP / ISP.
5. Alert the staff to any academic, behavioral or social-emotional issues or special information about an individual student and work closely with faculty and administrative team to make necessary changes. Identify need for educational testing and make referrals.
6. When requested, serves as a resource person to the faculty.
7. Represent Vail Christian High School in any district PSSP / ISP meeting by providing information and student work as necessary.
8. Work closely with Mrs. Lori Hixon, Director of College Counseling, and Ms. Mindy Larson, Principal, to make any necessary applications for Special Testing accommodations to College Board SAT or ACT.
9. Regular communication with each student and their family (when appropriate/necessary) regarding student performance, organizational and executive function skills, spiritual/emotional mindset, and progress regarding personal student goals. Communication between Resource Director and family may take the form of phone calls, written emails or requested conferences.

Students enrolled in student Resource classes earn .25 credits per semester.