

# Vail Distance Learning High School Course Offerings

## English

### English 1A & 1B

Includes the study of composition, literature, spelling, grammar, research, and study skills. 2 semesters. 1 credit

### American Literature A

A required sophomore course emphasizing the writing process. Thinking, composing, editing, research, vocabulary, grammar and usage skills are emphasized. 1 Semester ½ credit.

### American Literature B

Looks at themes in literature while the students level of terminology is reinforced and expanded through analysis. Stresses the understanding and appreciation of literature. 1 Semester ½ credit.

### Modern Literature A

Reviews and stresses language flexibility, sentence structure, and content development in the writing process. Emphasis is on organizing, developing, editing and revising compositions in exposition, narrative, argumentation, and persuasion. Also includes vocabulary development, oral communication and research skills. 1 Semester ½ credit.

### Modern Literature B

Coming soon.

### World Literature A

Focuses on writing for a variety of purposes and audiences. 1 Semester ½ credit.

### World Literature B

This course is designed to present a variety of stories that enable the student to develop critical thinking skills and to relate each story to contemporary issues. The student will demonstrate creative writing skills and develop the various components of a short story, with a well-developed plot line. This course also develops literal, interpretive, critical and appreciative reading comprehension skills that will be demonstrated through artistic or graphic representation, or writing. 1 Semester ½ credit.

## Math

### Algebra 1A & 1B

Content includes solving and graphing equations and inequalities, the slope of a line, writing linear equations, systems of linear equations and inequalities, properties of exponents, exponential functions, radical expressions, quadratic functions, solving quadratic equations, rational expressions, square root functions, the Pythagorean Theorem, the distance formula and problem solving. 2 semesters. 1 credit

### Geometry A & B

Curriculum includes the study of geometric methods, properties and relationships as a means to recognize, draw, describe, connect and analyze shapes and representations in the physical world. 2 semesters. 1 credit

### Algebra 2A & 2B

Content includes solving and graphing equations and inequalities, slope, writing linear equations, systems of equations and inequalities, functions, properties of exponents, operations on polynomials, rational algebraic expressions, radical expressions, imaginary numbers and complex numbers, solving quadratic equations, distance and midpoint formulas, conic sections, logarithms, sequences and series, and matrices. 2 semesters. 1 credit

# Vail Distance Learning High School Course Offerings

## **Pre-Calculus/Trigonometry A & B**

Content includes an in-depth study of Algebra II topics in addition to trigonometric functions, graphing trigonometric functions, trigonometric identities, sum difference identities, double-angle and half-angle identities, inverse trigonometric functions, solving trigonometric equations, simple harmonic motion, polar coordinates, and vectors. 2 semesters. 1 credit

## **Science**

### **Earth Science A & B**

Includes energy in the earth system, geochemical cycles, origin of the earth system origin of the universe, galaxies and stars, infrared and gamma rays, laws of matter in the universe, properties of the earth's materials, objects in the sky, history of the earth, earth in the solar system, resource management and depletion, and future options. Study material includes origins of flights in Greek mythology, balloons, zeppelins, warplanes, formation of winds, oceanography, and decay of radioactive isotopes. Students will measure metric mass, examine the characteristics and cycles of the moon, and study climate in the United States. 2 semesters. 1 credit

### **Biology A & B**

Instructional topics covered include cells, respiration and replication, molecular basis of heredity, monerans and viruses, protists, fungi, vascular and nonvascular plants, flowering plants, porifera, cnidaria, mollusks, echinoderms, arthropods, vertebrates, interdependence of organisms, matter, energy, organization in living systems, behavior of organisms, reproduction and heredity, regulation and behavior, the nervous system, circulation, respiration, digestion, excretion, populations, ecosystems, characteristics and life cycles of organisms, and social issues in Biology. 2 semesters. 1 credit

### **Chemistry A**

Includes laboratory safety, identification of equipment and chemistry techniques, using the scientific method, scientific notation, dimensional analysis, significant digits, atomic structure, comparing and contrasting atoms, ions, isotopes, elements and symbols, and electron configuration. Student activities include solving problems involving fractions at unity, determining atomic mass and atomic number, naming multivalent metals and nonmetals, forming binary and ternary compounds, and using the periodic chart to determine ionic charges. 1 Semester ½ credit.

### **Chemistry B**

Includes stoichiometry, empirical and molecular formulas, thermochemistry, modern atomic theory, quantum mechanics, nuclear chemistry, molecular geometry, laws of thermodynamics, heat of reaction and formation, states of matter, kinetic molecular theory, colligative properties, acids and bases, equilibrium, intermolecular forces, surface tension, and an introduction to organic chemistry. Student activities include calculating pH of a weak acid/weak base, expressing solution concentration, and comparing or contrasting ideal and real gases. 1 Semester ½ credit.

### **Conceptual Physics A & B**

Includes the mathematics of physics, motion in a straight line, acceleration, forces, vectors, projectile motion, universal gravitation, momentum, work, simple machines, energy, thermal energy, gas laws, power, waves and wave energy, sound, light, electricity, circuits (series, parallel and combined), transmission, astronomy and electromagnetism. Student activities include calculating the speed of acceleration, adding vectors, and measuring wave energy. 2 semesters. 1 credit

## **Social Studies**

### **World History A**

Traces the development of civilization from its early society to the early Renaissance. Includes areas of civilization, influences on civilization (strong emphasis on early civilization), problems and conflicts of civilizations, using geographic tools and research skills. This course meets graduation requirements for World History/World Geography. 1 Semester ½ credit.

# Vail Distance Learning High School Course Offerings

## **World History B**

Traces the development of civilization from the Renaissance to present. Includes areas of civilization changes, influences, problems and conflicts of modern civilization. Proper use of geographic tools and research skills will be reinforced. This course meets graduation requirements for World History/World Geography. 1 Semester ½ credit.

## **US/AZ History A**

This course examines the causes and events leading to the Civil War and its multiple effects on the economic, social, political life of the nation. Other major topics include America's industrialization and its effects on business, labor, immigration, urbanization, and expansionist foreign policy, progressivism, and the United States involvement in World War I. 1 Semester ½ credit.

## **US/AZ History B**

This course examines the histories of the U.S. and Arizona are examined through the many challenges faced in the twentieth century including: the "Roaring Twenties," the Great Depression, World War II, the Cold War, the Civil Rights Movement, the Korean War, the Vietnam War and Watergate. NOTE: This course plus US/AZ History A meets graduation requirements for American/Arizona history. 1 Semester ½ credit.

## **Government**

Required for graduation. The fundamental of government on the national, state and local levels will be examined, including the the three branches of government, rights and responsibilities of American citizenship, and the development and role of political parties. NOTE: This course meets the graduation requirement for American Government. 1 Semester ½ credit.

## **Economics**

Familiarizes the student with basic principles of economics, with an emphasis on capitalism and resource allocation. Included are the principles of financial management and career planning. Close attention is given to micro and macro economic applications. 1 Semester ½ credit.

## **Art**

### **Art Appreciation**

Art Appreciation is a one-semester course in the history of art (primarily western art). The course is designed to increase the student's knowledge of art, artists, schools and movements; chronological periods and specific dates; and the subjects, styles and techniques of particular works of art. 1 semester ½ credit

## **Computer/Business**

### **Business Applications A**

Students will learn computer applications and concepts as they develop keyboarding/numeric keypad skills. Topics include effective use of an operating system, using multiple input devices, formatting Microsoft Word Documents, and an introduction to voice recognition software. 1 Semester ½ credit.

### **Business Applications B**

This is a hands-on course in which students will learn several computer programs using Microsoft Office. Word processing (Word), spreadsheets and charts (Excel), Internet research skills, graphics, and presentations (PowerPoint) will be learned. Students will continue to develop inputting skills (keyboard, voice, 10-key). 1 Semester ½ credit.

# Vail Distance Learning High School Course Offerings

## Electives

### AIMS Prep

An intensified review of algebra and geometry concepts aligned with the Arizona Academic Standards. This course is appropriate for students who have not successfully passed the AIMS math test. 1 Semester ½ credit.

### Classical Guitar A

This is a classical guitar course designed to introduce the student to the technique and music of the guitar as a solo instrument. Designed for the absolute beginner. Note reading, rhythms, and basic skills are the goals. Individual and group study, with public performance possible. 1 Semester ½ credit.

### Classical Guitar B

This is a classical guitar course designed to introduce the student to the technique and music of the guitar as a solo instrument. Designed for the absolute beginner. Note reading, rhythms, and basic skills are the goals. Individual and group study, with public performance possible. 1 Semester ½ credit.

### Drugs in Society

The purpose is to educate the student about as many different aspects of drug use and abuse. The topics that will be covered are: types of drugs, effects of drugs, history of drug use and abuse, drugs and society, addiction and recovery. 1 Semester ½ credit.

### Geometry Support

This geometry course assists students in meeting the state mathematics standards for 10th grade. Topics will include inductive and deductive reasoning and topics from plane and solid geometry. Practical application of content will also be presented. This course will not meet the competency requirements for Arizona universities or NCAA. See counselor for details. 2 semesters. 1 credit

### Information Technology

Students are introduced to the basics of digital imaging and Web publishing. The course will be divided into numerous projects that will require students to manipulate digital images through the use of a photo editing program, Adobe Photoshop Elements. While any photo editing program may be used, Photoshop Elements is strongly suggested since it was selected because of Adobe Photoshop's standing as the standard for the industry. It will expose students early on to the workings of the program as they entertain the possibilities of pursuing more advanced courses in college or through a trade school where Photoshop will most likely be used. Most assignments will be published to the student's personal website that they will maintain during the semester. 1 Semester ½ credit.

### Music Appreciation

This is a non-performance music appreciation class, which introduces the basic elements of music through the study of music composition and musical instruments, and through the historical development and styles of western hemisphere music. The course includes listening to and evaluating several styles of music. The historical component covers music of early civilizations to 20th Century, with a focus on contributing composers. 1 Semester ½ credit.

### Paperback Literature

This course develops skills in reading and writing. Students spend class time reading books which they select. Students are encouraged to read and analyze various aspects of literature. Written reviews required. 1 Semester ½ credit.

# Vail Distance Learning High School Course Offerings

## **Personal Development**

A step-by-step guide to help teens improve self-image, build friendships, resist peer pressure, achieve their goals, get along with their parents, and much more. 1 Semester ½ credit.

## **Basic Science**

A capstone science course at the junior high level and provides the conceptual foundation for the high school science curriculum. Students in Basic Science receive instruction and practice in developing and refining scientific skills and methods which are prerequisites for success in subsequent science classes. Using chemistry, physics, and astronomy concepts as a framework, students in Basic Science discover and collect evidence that supports the atomic/molecular theory of matter. These principals lay the groundwork for understanding all biological and chemical relationships. Basic Science includes Science Processes, Life Science, Earth Science, and Chemistry. Basic Science may include dissection. 2 semesters. 1 credit

## **Physical Education**

### **Physical Education**

This class is designed for the student who wants to learn the basics of bowling so that they may participate, enjoy, and be successful in this popular sport. Students must bowl 18 games at a bowling center. Payment for the 18 games is the student's responsibility. 1 Semester ½ credit.

### **Health**

The student will learn about mental, physical and social wellness. Wellness describes a lifestyle in which the physical, social, intellectual, psychological and environmental components of health are integrated. Some independent physical activity is required. Students with medical concerns should check with their physician before starting any course that requires some level of physical activity or endurance. 1 Semester ½ credit.