

NEW VISTA HIGH SCHOOL COURSE DESCRIPTION GUIDE 2022-23

**This catalog includes the courses offered
at New Vista for the school year 2022-23.**

**For more information, or if you have any questions
about the current course offerings,
please contact the school at 720-561-8700.**

**All courses in academic areas are aligned with Boulder Valley School
District and State of Colorado Content Standards.**

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APPLIED TECHNOLOGY

AT06S - Basic B/W Photo

This course is an introduction to black and white photography. Topics to be covered include camera handling, exposure, processing and printing film. We will study the history of current trends and career options in photography through slide talks, class discussions and guest presentations. Students will need to own a 35mm, single-lens reflex camera or rent one from NVHS. Written projects are required. *(See also Arts)*

Course fee: \$35 Camera Rental: \$20.00

AT03S - Intermediate B/W Photo

As a follow up to Basic Black and White Photography, topics in this course will include a study of exposure systems such as the Zone System, studio lighting techniques, flash photography, and unusual printing methods such as solarization. Students will complete and present a final portfolio of their work. *(See also Arts)*

Course fee: \$35 Camera Rental: \$20.00

Prerequisite: Basic Black and White Photography

NV12A & B- Bicycle Technology 1A & 1B

This one-year course is designed to introduce and excite students about career pathways within the bicycle industry and prepare them for entry-level positions as bicycle technicians or retail associates. Practices are developed and assessed by a combination of hands-on skill checks, written assessments, presentations, and project-based learning. This course is shaped by some of the Next Generation Science Standards (NGSS) criteria and conceptual innovation for teaching science. Students can earn and be awarded a Bicycle Technology Level 1 industry-endorsed certificate and/or a Career Technical Education (CTE) Certificate, after learning career readiness skills in combination with professional technical practices. **Course Fee \$50**

AT26Q - Digital Imaging

Learn to use Adobe Photoshop to manipulate and create images. Explore the ever changing field of digital imaging and learn the tools necessary to effectively communicate with the digital arts. **Course fee: \$35.00** *(See also Arts)*

AT24S - Mixed Photo Media

Live life and journal. Use Black and White film photography, collage, painting, unconventional photo processes, book making, found object art and writing to explore, document, reflect, process and celebrate your life experience. Explore journal makers through the decades, reclaim and find your inner voice. *(See also Arts)*

A/T620Q - Jewelry

This class is an introduction to metalsmithing. Working with various metals and stone, we will be covering the cutting, shaping, bending and finishing of jewelry pieces. The emphasis will be on self-expression using the techniques of metalworking. Topics include the use of machines and hand tools, safety, and basic fabrication and soldering techniques in copper, brass and silver. *(See also Arts)* **Course fee: \$35.00**

AT34S - Textile Survey

In this class students will have the opportunity to taste a variety of textile arts such as basketry, surface design, felting, and weaving. *(See also Arts)*

Additional Applied Tech Offerings:

AR13S – Art Portfolio *(Please see Arts)*

A010Q – Ceramics *(Please see Arts)*

LA08Q – Composition 2 *(Please see Language Arts)*

LA/AT89S - American Short Stories & Video *(Please see Language Arts)*

LA/AT57S - Just Read: Mystery, Crime & Video

SS18Q—Make Money- Get Paid *(Personal Financial Literacy)* **(Please see Social Studies)**

SC13S - Physical Science – Lab Skills *(Please see Science)*

IIP3Q - Post Secondary Research *(Planning for College Admissions)*

NV38Q - Popular Music & Recording Techniques

MA68S – Statistics: Analysis *(Please see Math)*

MA67S - Statistics: Probability *(Please see Math)*

SC05S – Topics: Anatomy and Physiology Science of Exercise *(Please see Science)*

M59S - Topics in Math *(Please see Math)*

LA/AT119S – WW: Documentaries & Video *(Please see Language Arts)*

LA/AT58S - WW: Screenplays and Video *(Please see Language Arts)*

LA37Q – WW: Student Publication—“The Leek” *(Please see Language Arts)*

LA321Q- Yearbook *(Please see Language Arts)*

ARTS

A009Q – Acting --Theater Improv.

Students will learn the fundamentals of the stage in a class for all experience levels. The course will cover the development and creation of a character, the preparation of monologues and scenes, performance dos and don'ts, relevant acting terminology and important readings from acting greats. Students should be prepared for a class that will push them to explore, develop, and refine characters through analysis of scripts, performances and critiques. They will be expected to present to their peers in both formal and informal scenes and improvisations, as well as watching and giving constructive feedback. Students with acting experience are welcome and encouraged to join. *(See also Language Arts)*

AR24S - Artistic Anatomy

Artistic anatomy is necessary for understanding the structure of the human body. During this course I will refer to different theoretical sources and I will also explain / demonstrate how to transform the anatomical aspect into expressive drawing. There will be occasional reference to History of Art and Renaissance Masters' artwork.

The course has two major sections:

*Study of the skeletal structure * Study of the superficial layer of muscles

Each section will be subdivided in the theoretical part (anatomical terms, function, etc) and the drawing part. The final grade will reflect the combination of student's knowledge of the theoretical side of anatomy and the efficient drawing of the bones / muscles of the human body. **Prerequisite:** Foundations in Drawing **Course fee: \$35.00**

AR13S – Art Portfolio

This class will cover putting together a portfolio for submission to art school. We will draw from life and your imagination, paint, sculpt, and explore various art forms. Ideal for anyone who might consider art as a career, but also suitable for advanced art students. A class goal will be to assemble a collection of your artwork in a PowerPoint presentation. (See also Applied Tech) **Prerequisite: Any other NV art course Course fee: \$35**

AR08S – Art and Psychology

This course is an introduction to Psychology, the study of the mental function and behavior, and studio art practices. We will study theories, psychologists, neurology, cases and approaches of therapy while working as artists in the studio. The artwork will reflect units in Psychology such as Freudian Psychology and Surrealism, Carl Jung and Archetypes and Rorschach Inkblot Testing. (See also Social Studies) **Course fee: \$35**

A010Q – Ceramics

Students will be given the opportunity to explore and experiment with clay in order to discover their own means of artistic expression. This course will include a brief history of ceramics and ceramic artists, hand-building demonstrations, and experimentation with various glazing techniques. (See also Applied Technology) **Course fee: \$35**

A40S – Draw Paint 1

This class is geared towards students wishing to increase proficiency in both drawing and painting. Drawing will be from observation, references and imagination. We will work with a variety of media including various drawing materials, acrylic paint, watercolors, inks and spray paint. The goal is to increase self-confidence, explore a variety of styles and media and produce successful works of art. **Course fee: \$35**

A37S - Foundations in Art

This is a pre-Advanced Placement studio art class open to all grade levels. We will cover level one Drawing, Painting and Sculpture. The class will be informative for beginning to advanced art students. Drawing will include drawing from life and from your imagination. In painting we'll experiment with acrylics, aerosol, and watercolors. Sculpture will be in clay, paper and found objects/recycled material. The class will take a field trip to BMoCA (Boulder Museum of Contemporary Art and will have visiting guest artists. There is no prerequisite. **Course fee: \$35.00**

NV41Q - Guitar 1

Learn the basics of the guitar (with a sprinkling of songwriting)! By the end of this course you'll be playing an original piece of music! We'll begin with tuning, basic maintenance, strings and notes, and work our way to various playing and performance techniques including rhythm, strumming, and picking. We'll discuss basic chords and how to use them in a musical way. All this will lead to our final project: an original composition of your own! Maybe the next Taylor Swift or Bruno Mars is hiding within you! No prior experience needed.

N41Q – History of Rock

What is Rock-and-Roll? How did Little Richard evolve to Skrillex? How did Doo-Wop help create Metal? How could Blues, Jazz, and Gospel possibly be related to Punk, Country, and The Rolling Stones? Why'd The Beatles, well...become the The Beatles? Through discussions based upon various listening examples, we'll explore, "What is Rock-and Roll".

AR09Q - Illustration & Design: Archetypes & Mythology Design

Use traditional and digital art techniques to ****collaboratively**** create, design and print a deck of cards representing archetypes and your personal or collective mythology. In addition to exploring the history, psychology, artistry and social implications of various archetypal representations through the ages, we will also delve into collaborative work processes and skills. **Course fee: \$35.00**

A007Q - Multi Media Art

This class explores art through drawing, painting, sculpture, digital photography, Manga, contemporary surrealism, and fabrics. The class will also include mendhi (henna tattoos) and edible art. Whether you like to dabble in various art forms or want to put together a portfolio for art school, this class is enjoyable for all levels. Keeping a sketchbook/visual journal is encouraged and time will be set aside for free drawing and painting.

Course fee: \$35.00

NV38Q - Popular Music & Recording Techniques

Popular Music and Recording Techniques is a one-semester course that caters to the music lover without an element of public performance. We will cover the history of American popular music from the late 1800's to present day, work with microphones, mixing consoles, and live sound systems, and create original compositions using various computer programs. *(See also Applied Tech)*

A018Q - World Music: Marimbas

This class will focus on intensive studies of marimba from the Shona people of Zimbabwe. No previous experience is required, but students must participate in a final Exhibition Day performance.

Additional Arts Offerings:

AT06S - Basic B/W Photo *(Please see Applied Tech)*

AT26Q - Digital Imaging *(Please see Applied Tech)*

AT03S - Intermediate B/W Photo *(Please see Applied Tech)*

A/T620Q - Jewelry *(Please see Applied Tech)*

AT24S - Mixed Photo Media

AT34S - Textile Survey

LA/ART003S Theater Production *(Please see Language Arts)*

LA11S – Social Issues/Graphic Novels

INTERPERSONAL and INTRAPERSONAL SKILLS

IIP5S - Community Adventure Program

The Community Adventure Program (CAP) is a unique class offered at New Vista High School through the Cottonwood Institute. In CAP we will practice essential camping and wilderness survival skills *and* inform ourselves about pressing environmental issues affecting our community. In addition, you will begin to explore the ways that environmental issues are intricately connected to social justice, wealth inequities, and people's personal choices. Time in class will be spent hiking, practicing nature awareness skills, playing games, and meeting with local organizations. You will go on many field trips as well as two weekend overnights. You will also work with your classmates to design a student-directed Environmental Action Project to address the environmental issue of your choice.

CAP is for students who want to practice outdoor skills, explore Colorado's wilderness, discuss and debate local issues and have a positive impact in the community.

NOTE: this class has a \$20 fee, financial assistance is available!

IIP9S - Human Sexuality

Human sexuality is a complex issue in today's society. There is so much to know that it is often difficult to be sure of the correct decisions to make. In this course you will gain the tools of knowledge necessary to make choices about your sexuality. We will address mate selection, anatomy, alternative lifestyles, contraception, and many other issues through readings, projects, speakers, and presentations. *(See also Language Arts)*

IIP11Q - Making It: Study Skills

This class provides support for students to be successful in their other classes. This class is by "Placement Only".

IIP23Q – Meditation and Mindfulness

In this class students will learn the basics of a mindfulness practice through the techniques of sitting and walking meditation. The class will also introduce strategies for practicing mindfulness "off the cushion" and developing a regular, personal practice. Most of the class will be spent in silence practicing the techniques. There will also be whole class discussions of student experiences and some one-on-one coaching.

IIP3Q - Post Secondary Research (Planning for College Admissions)

This course offers an incredible opportunity to explore post high school options, and to help relieve some of the stress and anxiety that inevitably accompanies this process. Though this course does focus on the college search and application process, students will also learn about careers, resumes, financial literacy, and gap-year programs. Much time is dedicated to in-class research to allow students the opportunity to explore the options that interest them most. If time and resources allow, students will have the opportunity to visit nearby colleges, universities, and work-places. As a final project, students will complete a full college application process. By the end of the quarter, students will have a binder filled with everything they need to know about searching for and applying to post-secondary institutions, including information on college entrance exams, the application process, writing an essay, financial aid and scholarships, and more. The ultimate goal is for each student to understand what careers and post-secondary paths are their best fit, and to understand the steps to take to make this a reality. This class is intended for Juniors and Seniors. Sophomores may register with permission from their advisor and their counselor. *(See also Applied Tech)*

PE02Q - Topics in PE: Yoga

During high school you undergo more physical and emotional changes than at any other time in your life. This yoga class will give you the opportunity to witness these changes and develop a practice that will address your personal needs. This course is designed to help you learn to reduce stress, increase your power of focused, clear attention, and develop balanced muscular strength, flexibility, and stability. You'll learn how to relax, breathe, and enjoy. Not only will your performance in sports and academics greatly improve, but so will your day-to-day, moment-by-moment success and happiness. By the end of this course, you will obtain a profound sense of ownership of your body and of your life. Students with or without previous yoga experience are welcome to attend.

LANGUAGE ARTS

Please note: All World Literature and American Literature classes focus on both literary analysis and composition.

LA318S - American Lit: 20th Century

This class will introduce students to the wealth of American literature from the 20th Century. We will not cover everything, but rather provide a foundation of knowledge, an introduction to authors and a chance to explore. The course will give students a sense of what ideas exist (and existed) and allow each student to vigorously pursue her/his favorite authors. Students will need to think critically and contribute their ideas to classroom activities.

LA604Q - American Lit: Moby Dick

This class will focus solely on Melville's *Moby Dick*, one of the more famous American novels. This novel will be the focus of discussions, seminars, and writings. Students will decide if it's a classic. We will look into background texts and information to put the book into context.

LA61S - American Lit : Science and Literature--From *The Martian* to *Interstellar* to *Star Wars*, science of Science fiction will examine the actual science behind popular Science fiction stories, novels, TV shows and films. We will question the feasibility of terraforming, faster than light travel, phasers, and wormholes in novels we read, as well as writing our own stories and defending their scientific merits. Come for the stories; stay for the science. (*See also Science*)

LA113S - Analyzing Characters in Literature

In the history of literature, there are characters that have become unforgettable. There are characters that we identify with whether they were created 300 years ago or in our current day. There are characters that have been so ingrained in our culture that we perceive them as real life human beings. During this course, we will explore and practice the fine art of designing and creating memorable characters. We will analyze various short stories, poetry and novels, as well as view film and art to gain insight into how one creates a character that will stand the test of time. **Prerequisite: Foundations of Writing**

LA07S - College Writing

In this class students will learn the skills of college writing: writing short answer essays (blue book exams), writing research papers, and writing short analysis papers.

LA08Q – Composition 2

This class will provide students a chance to explore various forms of writing. Although the students will need to fulfill many of the same requirements and complete many of the same exercises, they will compose and revise four papers or stories. **For a prerequisite, students need to have successfully completed any New Vista Writers' Workshop—e.g. Short Fiction, Power of Place, History of Film, Sports Writing., Writing about Music, The Leek, College Writing.—anything with a “WW” in front of the title.** (See also *Applied Tech*)

LA/ART103S - Creating 'Zines

Since the invention of the printing press in the sixteenth century, every day people have created pamphlets to spread information or entertainment. In today's culture, these underground publications are called Zines. Zines are hand-made, photocopied works of art which are limited only by the author's creativity. In this class, we will discover the different genres of Zines, and design our own publications in the forms of personal narrative, interview, and research/information. Students will learn about the writing process through creating Zines, and revise one of their publications for a final project.

LA99S - Debate and Argument

In this class students will learn to define their arguments on a wide range of issues that matter to them. This involves clarifying the position, developing supporting evidence, identifying counter arguments, and finding evidence to refute the other side. Students will also learn how to conduct discussions and debates that respect those with different opinions and maintain relationships between people who disagree. The emphasis will be on developing the speaking and listening skills that will help you in school, politics, work, and life.

LA213Q - Foundations of Writing

This class introduces students to writing. Students will explore different forms of writing, strengthen their basic organizational and grammatical skills, and have a chance to find an effective, authentic writing voice. Although all students will need to complete many of the same assignments, writers will generate their own unique topics. Students will strive to make their writing as clear as possible in order to have the best chance of communicating.

LA89S - Humanities 101

In this course, we will focus on how culture is created. Through art, literature, music, and film we will examine how humans make meaning of their existence and their experiences, personally and socially. Students should expect to keep their minds open to a variety of experiences through a variety of media. We will also look at how art, literature, music, and film intersect to create meaning.

LA/AT57S - Just Read: Mystery, Crime & Video

This class will allow students to explore authors from around the world, specifically, mystery, crime, and detective story writers. Students will also learn the basics of video production, and for their final project, make movie adaptations of their favorite stories.
(See Also *Applied Technology*)

LA43Q - Just Read: Tolkien

We will investigate in depth a variety of writings by JRR Tolkien and other fantasy and Science Fiction writers.

LNV122Q LA: Academic Support

Students will communicate information, ideas, and concepts necessary for academic success in the content areas of Language Arts, Mathematics, Science, and Social Studies. The teacher will support students individually and in small groups to develop the prerequisite content skills and language forms and functions necessary for graduation and beyond. Through direct language instruction, literacy and math interventions and self-paced learning, ASC will provide a supportive environment in which students will gain the essential skills necessary in support of grade level content area classes.

LA11S – Social Issues/Graphic Novels

From *Watchmen* to *Fun Home*, graphic novels are a modern and interesting addition to literature. In this class students will examine the literary value as well as the artistic production of graphic novels. Students will be expected to read and analyze the themes, characters, and plot, and how they are supported and enhanced through the genre of graphic novel. Additionally, students will work in teams to write, illustrate and publish their own graphic novels. (See also Arts)

LA70S – Social Justice and Literature

During this course we will study accounts of peace movements and social justice through a variety of contemporary and popular works. We will work to question whether the works we read are truly doing their job in addressing social justice, or if they are actually perpetuating injustice. We will look at different areas of focus: gender, race, class, religion etc. through both non-fiction texts and fictional pieces by such great people as Martin Luther King Jr., Nelson Mandela, Yoko Ono, Rigoberta Menchú, Mahatma Gandhi and many more.

LA/ART003S - Theater Production

In this class students prepare and perform a full production for public performance. The works we put on, in general, are not well known to American theater going audiences. Plays for this class are selected for the opportunity they give students to explore social and historical issues, relationships between characters and different aspects of themselves. (See also Arts)

LA01S - World Literature

In this course students will be exposed to a wide range of literature from around the world. Each quarter will have a different focus--it could be British Literature or Asian Lit. or American Literature. It could be focused on a specific author such as Victor Hugo (*Les Mis.*) or genre or time period--such as avant garde. Whatever the focus, it will be interesting and provide an opportunity to discuss a variety of literature from around the world.

LA02S - World Lit: British Lit 1

In this course we will read extensively from some of the most important literary works of English writers, as well as study European culture and history. We will begin with Anglo-Saxon and Medieval literature and extend our study through the early 1800's. Some of the topics and writers we will study include Chaucer's *Canterbury Tales*, *The Legend of King Arthur*, a play by Shakespeare, and readings from Jonathan Swift and Milton. Expand your knowledge of the great literary works through this course.

LA03S - World Lit: British Lit 2

Studying these authors will expand your perspective on the impact and influence of literature on culture. The focus will be on the Romantic poets such as Wordsworth, Shelly, and Keats, who wrote about topics such as nature, the metaphysical, and how the individual fits into society. We will also study the effects of the rule of Queen Victoria on European society by reading the works of authors such as Tennyson, Oscar Wilde, the Brownings, and the mysterious tales of Sir Arthur Conan Doyle and his eccentric detective, Sherlock Holmes. We will also study 20th Century writers and the evolution of the novel in the late 1800's. This course is a continuation of British Literature I, but students need not have taken British Literature I to enroll in this course.

LA/SS23S - World Lit: China and Japan History & Literature

For this class, students will integrate short fiction, poetry, drama and prose from China and Japan into the context of history, geography and world events. The literature of these cultures reflects their place in the world as well as the unique circumstances and qualities of each nation. (See also *Social Studies*)

LA120S – World Lit: Psychology of Imprisonment

What are the effects of imprisonment on the human psyche? How do people deal with the strain of captivity and make meaning of their lives? How do they transition back into society? During this course, we will examine various non-fiction texts in order to analyze the inner psyche of those imprisoned and those that imprison others. We will look to deepen our understanding through examining research, memoirs, poetry, film, and the personal stories of guest speakers. You will also have the opportunity to choose a course related topic to research in depth and share with your classmates.

LA27S- World Lit: Utopian Literature

The class will consist of writings, discussion and activities related to Utopian and Dystopian Literature. The class will examine several authors' ideas and discuss the possibility of perfecting society. Anticipated Readings include but are not limited to: *We* by Y. Zamyatin, *1984* by George Orwell, *Brave New World* by Aldous Huxley, *Herland* by Charlotte Perkins Gilman, *Utopia* by Sir Thomas More, and others.

LA30S - World Lit: Women's Literature--In this course, we will analyze and discuss classic and contemporary works by, and about, female-identifying people. As we read and discuss these texts, we will also explore topics such as traditional and non-traditional gender roles, powerlessness and empowerment, cultural ideals and non-realities of femaleness, among many others. Prerequisite: Foundations of Writing

LA321Q - Yearbook

Students work cooperatively with their peers and adults to design the published school yearbook. They set and achieve goals, organize time and tasks, develop and adhere to a budget, edit yearbook copy, captions and layouts, problem-solve and develop back-up plans. Meeting publication deadlines throughout the year is an essential priority. In the end, students reap the rewards of distributing a customized book in which their work is featured. Students may enroll more than one year; second year students are eligible to become editors, third year students are eligible to become editors-in-chief. In some circumstances, first year students may serve as editors with teacher permission. (See also *Applied Tech*)

WRITER'S WORKSHOPS

Please note: all **Writers' Workshops** have a major emphasis on composition. Some focus exclusively on writing genres; others approach writing with a joint emphasis on literature and composition. **All have the prerequisite of Foundations of Writing.**

LA612Q - WW: Creative Writing

Writing can be a powerful form of communication if properly executed. It is often the more subtle techniques that make the strongest statements. In order to properly apply these techniques to our own writing, it is essential to first study the "masters" and then break-away into individual experimentation. Therefore, during this course we will first read pieces by various authors to distinguish how and why they implement particular strategies and then bring those strategies and techniques into our creative realm. We will be working in both poetry and prose forms. **Prerequisite: Foundations of Writing**

LA09Q - WW: Culinary Composition

This course is designed to give you exposure to and practice in writing about all things food—the methods for preparation, the recipes, the restaurants, and the entire gamut of the gustatory experience. We will write essays, reviews, recipes and various treatises on the wonders of the culinary world. Appetite required. **Prerequisite: Foundations of Writing**

LA/AT119S – WW: Documentaries & Video

This class will lead students throughout the process of researching, writing filming and editing their own documentary. We will study what makes documentaries and study the filmmaking process from start to finish. We will emphasize planning, composition and what makes professional looking video. Students will initially complete smaller drafts of video projects. The concept of drafts will be important because we will produce many shorter pieces with the hopes of improving along the way. The final project will be a short documentary. (See also *Applied Tech*) **Prerequisite: Foundations of Writing**

LA/AT58S - WW: Screenplays and Video

This class will focus on both writing and video production. Students will learn screenwriting process and format. They focus on aspects of storytelling—such as character, dialogue and adaptation. Smaller projects at the beginning of the class will equip students for the final project: A movie based on an original or adapted screenplay. (See also *Applied Technology*) **Prerequisite: Foundations of Writing**

LA114Q - WW: Short Fiction

The craft of writing is best developed in a workshop environment, where students read and critique their own writing in a classroom community, striving to demystify the writing process. Students will learn from highly respected authors, as well as student writers, where short stories come from, what it means to write short fiction effectively, and how short stories get published. **Prerequisite: Foundations of Writing**

LA37Q - WW: Student Publication – “The Leek”

This class will provide students a chance to read and write satire, learn a little about newspaper writing and most importantly, improve each student's writing. Although this is a writing class, we will do a fair amount of talking, reading, revising, and critiquing in class, which will force a fair amount of writing and typing outside of class time. Students will need to fulfill many of the same requirements and complete many of the same exercises but will generate their own paper topic and write their own pieces. We will stress the writing process- Pre-writing, Drafting, and Revising. Students can expect to work their writing to a high level; each issue will constitute a phase, and there will be specific requirements for each issue/phase grade. Hopefully students will emerge from this class with improved reading, writing and thinking skills as well as an understanding of humor and satire. *The Leek* will take its own shape this year. **Prerequisite: Foundations of Writing** (See also *Applied Technology*)

Additional Language Arts Offerings--

A009Q – Acting --Theater Improv. (Please see Arts)

IIP9- Human Sexuality (Please see IIP)

SS/LA24S - US History and Literature: Equity in the United States (Please see Social Studies)

SS/LA25Q - Introduction to World History through Literature (Please see Social Studies)

SS/LA27S - World History/World Literature: Renaissance (Please see Social Studies)

MATHEMATICS

MA31AA – Algebra 1A

This class develops the concept of “variable” and “equations”, working with hands-on problems to do so in an interactive way. Students will review how to do operations with positive and negative numbers, and learn how to manipulate equations. They will also practice and come to understand order of operations when solving equations, and they will learn how to add and multiply polynomials. We will also study linear relationships in terms of equations, graphs and tables. Students, while learning basic algebra skills, will also develop problem-solving skills.

MA31BB – Algebra 1B

This class begins with a presumption that students have an understanding of variables and basic equations. This class will approach algebra in a more abstract way than Algebra 1A. Students will learn how to multiply and factor polynomials and how to solve problems with systems of equations. Graphing will be explored further and students will be solving more complex equations and problems, expanding on the work from Algebra 1A, looking at both linear and non-linear relationships. Problem solving will be the underlying basis of the course.

Prerequisite of “B” or better in Algebra 1A (MA31AA)

MA51AA - Algebra 2A

Students will expand their understanding of the concept of "function," the dependence of one variable in a formula upon another. They will learn that there are a small number of different types of functions that arise frequently and help us to describe a vast number of situations. This course focuses on linear, quadratic, and absolute value functions, as well as systems of equalities and systems of inequalities. The course will concentrate on these functions and students will learn to recognize them by studying characteristics of their equations and graphs.

Prerequisites: Algebra 1B (MA31BB), Geometry A (recommended)

MA51BB – Algebra 2B

Students will continue their understanding of the concept of "function," the dependence of one variable in a formula upon another. This course focuses on exponential, logarithmic, and trigonometric functions. Students will learn to recognize these functions by studying characteristics of their equations and graphs.

Prerequisites: "B" or better in Algebra 2A (MA51AA), Geometry A (recommended)

MA05S – Algebra 3

This course will explore trigonometric relationships through graphical and algebraic analysis, as well as applications of trigonometry using the Law of Sines and Cosines. Students will also be introduced to the study of analytic geometry: circles, hyperbolas, ellipses and parabolas. Polar functions will also be studied.

Prerequisite: Algebra 2B (MA51BB); Geometry A/B (recommended)

MA41AA - Geometry A

The principal purpose of this course is to develop a working understanding of fundamental geometry concepts in order to use them in problem solving. These concepts include symmetry, properties of polygons and circles, line and angle properties, congruence, similarity, ratios and proportions, area, surface area, volume, trigonometry, and the Pythagorean Theorem. Students practice forming conjectures and writing definitions based on what they discover during group investigations.

Prerequisite: Algebra 1A (MA31AA)

MA41BB - Geometry B

The primary objectives of this class are to develop logical reasoning, be able to write formal logical and geometric proofs, and to continue the study of topics from Geometry A (area/volume, similarity, trigonometry, etc) in a more challenging context.

Prerequisites: Geometry A (MA41AA)

MA68S – Statistics: Analysis

Statistics, data, and surveys are all around us. They may even influence the way we dress, what we eat, and whether we choose to ride a roller coaster. In this course students will take a closer look at surveys, the data they produce and how data can be manipulated. This course will also cover how data can be used to predict future events and the probability of those events happening. Students will explore why statistics are important and relate statistics to current events in a variety of fields. When this course is complete, students will have an understanding of such terms as standard deviation, z-score, and chi-square statistic. *(See also Applied Tech)*

Prerequisite: Algebra 1A (MA31BB)

MA67S - Statistics: Probability

In this course students will grasp a deeper understanding of probability and its uses. Concepts include probability of different types of events, combinations, permutations, expected value and real world applications, such as how likely it is to win the lottery and how probability can help us predict future events. There will be hands-on development of probability concepts, leading into developing formulas and some algebraic computation. *(See also Applied Tech)*

Prerequisite: Algebra 1B (MA31BB)

M59S - Topics in Math

This is a chance to see sophisticated mathematics as it is used in the real world. Major topics are: the role of mathematics in decision making and social change, and questions revolving around shape and growth. Specific topics include: growth patterns for different types of species or populations, whether living beings can attain certain heights or weights, voting systems, creating electoral districts, and fair divisions of bulky items. Projects may include research on such topics as how recent elections might have had different results with different voting rules, the under counting of some populations in the US census, and applications of the Fibonacci sequence. *(See also Applied Tech)* **Prerequisite: Algebra 1A (MA31AA)**

MA93A & B - Transitions to Algebra

Transition to Algebra allows students with IEPs who need a supplemental instructional period in order to explicitly learn the math concepts needed to comprehend and pass Algebra 1 to be able to count their work toward graduation credits through math elective credits. This provides a specific scope and sequence that can be systematized between schools for 10 math elective credits. Ultimately, this course will open up non content electives for students with IEPs who often miss out on those options. This class is by "Placement Only".

Additional Math Offerings:

SS/MA1S—Statistics and US History (See also Social Studies)

SCIENCE

AST101 Astronomy 1 with Lab—(FRCC Course taught at NVHS)

Focuses on basic phenomena and motions of the sky, such as seasons and phases of the moon, as well as the nature of light and matter and the contents of the solar system including the planets, moons, asteroids, and comets. Incorporates laboratory experience.

Prerequisites: Physical Science or equivalent, and a “B” Algebra I.

This course is worth 4 college credits and 1.3 NVHS credits.

SC31AA - Biology A

This course will explore the nature of disease and its effects on the human body. Students will be introduced to the basics of biochemistry, cell structure and function, cell division, viruses, bacterial diseases, and the function of the basic organ systems in human anatomy. The balance within and between living systems will be examined in order to understand the disruption caused by various types of disease states. Many of these concepts will be investigated in the lab, where the scientific method will be emphasized. Class work will include lab reports, class work, and homework. There will be a small group presentation to the class. Students will also conduct research and/or experiments on disease and do class presentations as individual final projects.

SC31BB - Biology B

This course will explore human organ systems, genetics, evolution and ecology from the perspective of homeostasis. How do systems in nature maintain a balance and react to stresses which disrupt the balance? The course will include lab work, homework, class work, quizzes, projects and, weather permitting, some fieldwork.

Prerequisite: Successful completion of Biology A

SC32 - Botany

This class is for anyone interested in plants. We will go beyond the classification of plants that is typical of Botany. We will study plant evolution, plant anatomy and physiology, and invasive species. We will look at how we use plants in our everyday life; including nutrition, bio-fuels, and other natural resources. There is no prerequisite for this class, basic Biology will be reviewed and/or re-taught as needed. Students must be willing to spend some time outside and getting dirty.

SC50AA - Chemistry A

This course will be a core chemistry course building on Physical Science. We will explore the relationship between the structure of matter and the interactions between different types of matter. A great deal of time will be spent in the lab conducting experiments, collecting data, analyzing the results and then applying the information through experiments on products which the students use in their daily lives. Concepts explored will include: bonding-ionic and covalent, the periodic table, acids and bases, reactions, entropy and titration by weight and volume. Class work will include lab reports, research, experiments, and class presentations as individual final projects.

Prerequisites: Physical Science or equivalent, and a “B” Algebra I.

SC50BB - Chemistry B

This is a continuation of Chemistry A. This course will cover topics including dimensional analysis, moles, measurement, equilibrium, redox reactions, and the gas laws. The emphasis will be on the way chemistry affects the lives of the students. Work in this course will include lab work, projects, tests and quizzes.

Prerequisites: Successful completion of Chemistry A and a “B” in Algebra 1.

SC20Q – Dendrology: A Study of Trees

We explore the diverse world of trees by examining the locals and the record breakers. We will first learn how to identify Boulder's own broadleaf and conifer trees and analyze growth patterns and unique adaptations to seasonal climate, fire, and clonal reproduction. Then we will examine the problems that face our local pines including the devastating bark beetles. Plan to learn some tree ecology and observe the interactions between trees and other local species. Finally we will study the Coastal Redwood, the world's tallest organisms, that hold ecosystems almost 400 feet in the sky; the Giant Sequoia, which is the largest non-clonal organism in history; and, the ancient Bristlecone Pine, the world's oldest living thing at almost 5000 years of age, which re-calibrated our carbon dating scale. Students should be prepared for field trips in the woods and group work on projects.

SC13S - Physical Science – Lab Skills

This course will provide students with an introduction to laboratory science. The focus of the course will be hands-on laboratory experiments, some of which will be student designed. Skills to be learned include measurement, experimental design, lab safety, lab write-ups, use of laboratory equipment, data collection, and graphing. Content to be covered will include introductory, fundamental ideas in both Physics and Chemistry through the design, execution and written description of experiments. This course will provide the foundation students need to continue on in Chemistry and/or Physics. This course fulfills 1.0 of the 2.0 Physical Science requirements for New Vista. *(Please see also Applied Tech)*

SC61AA - Physics A

This course covers linear motion, projectile motion, relative velocities, forces, friction, circular motion, work and momentum. Through applications or situations the class will derive relationships using data collection and discussion. Some basic skills, including simple trigonometry and vector addition, are covered in order to facilitate these endeavors.

Prerequisite: Completion of Algebra 2 or concurrent

SC61BB - Physics B

Concepts in this course include work, potential energy, kinetic energy, springs, simple harmonic motion, waves, sound and light. Projects of an individual's choosing, demonstrating understanding of physics concepts, are an integral part of the course. See also Applied Technology.

Prerequisite: Successful completion of Physics A, completion of Algebra 2 or concurrent

SC05S – Topics: Anatomy and Physiology (Science of Exercise)

How does exercise affect your body? Explore this question as we learn the anatomy and physiology of your muscles, motor neurons, cardiovascular system, and the brain. You will learn how exercise improves your mood, increases your life expectancy, reduces your chances of disease, and makes your brain younger and bigger. We will apply what we learn, collect and analyze data, and present research to our peers. Half of class time is spent learning academically while the other half is spent as action researchers exploring the effects of exercise on our own bodies and tracking adaptations. Expect to perform aerobic exercises, strength training routines, yoga moves, and mindfulness exercises in a very supportive environment. All fitness levels are welcome; effort is the only thing that matters (See also Applied Tech)

Additional Science Offerings:

LA61S - American Lit : Science and Literature

SOCIAL STUDIES

SS13Q – Civics: Mock Trial/Moot Court

In this class students get to enact hypothetical and actual court proceedings. Students take the role of prosecution, defense, judge, and jurors. In Mock Trial we deal with hypothetical scenarios; in moot court we enact a contemporary case.

SS35Q - Civics: Street Law

This course will focus on helping students develop a clearer understanding of their rights and responsibilities as citizens of the United States. Topics will include: basic Constitutional rights, family law, and other aspects of the legal system. Expect individual and group projects, several Socratic seminars, and hard work!

SS11Q - Civics: US Constitution

This class will focus on the political, social, and historical events that led to the formation of the United States Constitution. Students will examine how and why the Constitution was created and the tension and conflicts that resulted from its implementation. This course asks that students analyze primary source documents, engage in reading and writing, use critical thinking skills and participate in seminars and class discussions.

SS626Q - Civics: Supreme Court Cases

Some of the most interesting seminar texts are the actual decisions of the United States Supreme Court. In this course, we will "seminar" cases having to do with freedoms of speech and religion, rights of search and seizure, and other landmark cases. While the reading load is sometimes significant, the seminars are lively and the content unlike anything found outside of law school! Essay writing is the other emphasis of the class.

LA40S - Dante

Journey with Dante: the poet and pilgrim, through Hell, Purgatory, and Heaven. This medieval epic poem stands as a timeless piece of literature. The class will read the entire Divine Comedy together; it will be the focus of discussions, seminars, and writing and projects. The class will look at philosophical questions Dante poses on God, Love and Order in the universe.

SS/LA25Q - Introduction to World History through Literature

This class will explore and analyze historical events, themes and patterns through literature. Students will read historical literature of their choice and relate it to the particular events, peoples, cultures, etc in which their book takes place. Students should expect to do a fair amount of reading, a bit of writing and seminar discussions.

(See also Language Arts)

SS18Q—Make Money- Get Paid (Personal Financial Literacy)

This course will seek to make students competent in money management. Do you know how to write a personal budget, balance a checkbook or calculate the interest rate on a credit card? We will spend this Seminar covering district economic standards that will directly benefit students as they enter a world free of parents and filled with real world expectations and consequences around making, spending and saving money. *(See also Applied Tech)*

SS/MA1S—Statistics and US History

Statistics & US History will combine social studies and mathematical tools to explore US History by using statistical analysis and probability methods to consider historical events and patterns from pre-European arrival to present day. This course will also include an equity theme and will use statistics to reveal the inequities that existed and still exist in the United States. This course will combine skills in mathematics with historical analysis to provide students with a unique perspective on US History. (See also *Math*)

Prerequisite: Algebra 1B (MA31BB)

SS49S - US History: 1960's

The 1960's were a "happening" time and a major turning point in American social and political life. Civil Rights, Rock 'n Roll, and Vietnam are only some of the major issues. This course will cover the social life, politics, and history of this decade. Students who want to improve their social studies research skills should think about this class. There will be lots of skill building with interesting readings, books, videos and newspapers.

SS10Q - US History: Colorado

Why is Colorado the Centennial State? What happened to Zebulon Pike, and why should you care? Where is Ludlow, and why was there a massacre there? All of these questions, and many more, will be addressed in this class on the history of Colorado. We will look at the history of the state through different perspectives, including the Native American groups that have called Colorado home for thousands of years, various immigrant groups that have struggled and thrived here, and the working class who shaped the political and economic landscape of Colorado. Furthermore, this class will hopefully include some opportunities for off-campus learning experiences in the form of field trips to local historical landmarks and museums.

SS76S - US History: Fact or Fiction?

Where do you get your history? Often Hollywood releases blockbuster films about history, and in this class we will have an opportunity to see how historically accurate, or inaccurate, these movies really are. This trimester-long class will be structured as a survey of US History, and for every unit, we will watch a film based on the events we have studied. We will also critically examine the ways in which filmmakers portray US History, as well as come up with our own ideas for how an event in US History ought to be represented on the big screen.

SS210S - US History: Heroes & Heroines

History and American popular culture has made heroes of many people. Are these heroes and heroines justified? This course will explore the women and men who have impacted this country throughout U.S. History. The time period will be focused on the Civil War to present. Students will choose people to research and then defend their impact on history culminating in a presentation tournament to find our country's greatest hero or heroine.

SS552S - US History: Immigration

With the exception of the native peoples of this continent and the Africans brought forcibly as slaves, every inhabitant of the United States is an immigrant or the descendant of immigrants. Throughout the history of this nation controversies over which kinds of immigrants and how many of them should be allowed in at any given time periodically erupt. We are in one such moment now. In order to understand today's debates over immigration and immigration reform, this course will deal with the history and context of this controversial social issue.

SS/LA24S - US History & Literature: Equity in the US

This course will use the principles of Sociology to examine the American identity and its diversity. Specific topics include: Culture, Socialization, Immigration, Education, Labels and Stereotypes, Privilege, Lookism, Gender, Ethnography, Poverty, Racism, Homophobia/Heterosexism, Religion, Language and Ableism. Class readings and activities, field trips, essays, simulations, and discussion are the major activities of the course. (See also *Language Arts*)

SS46S - US History: People's History US

This is a history course that uses the book of the same title by Howard Zinn as the central text. Students will begin the course by examining the concept of "people's history" using underground newspapers from the late 1960's and early 1970's. This will lead to a working definition of people's history. Next, students will begin their study of Howard Zinn's book, currently a standard college and graduate history course text. The last major activity will be an independent "I-Search" project in which students undertake to learn in depth about a topic related to people's history.

HIS101S – Western Civilization: Antiquity- 1650 (FRCC course taught at NVHS)

This course explores a number of events, peoples, groups, ideas, institutions, and trends that have shaped Western Civilization from the prehistoric era to 1650. Reflects the multiple perspectives of gender, class, religion, and ethnic groups. Focuses on developing, practicing, and strengthening the skills historians use while constructing knowledge in this discipline.~~This course is one of the Statewide Guaranteed Transfer courses. GT-H11

This course is worth 3 college credits and 1 NVHS credit.

SS50S - World Geography

World Geography provides you with the skills and knowledge to better understand how people interact with the land, both historically and today. We will study local and world regions, climates, population issues, cities, trade, environmental issues, economic development, and natural hazards (tornadoes, floods, etc.). Students may choose a variety of topics for their projects.

SS19Q - World History: The Axial Age

According to historian Karl Jaspers the historical era between 800 BCE and 200 CE civilizations sprang up, independently, with unique new approaches to philosophy, government, social organization and religion. These civilizations developed in Europe, the Middle East and Asia with limited contact but significantly similar results. This seminar will be an exploration of ancient civilizations in Eurasia with some examination of African and Mesoamerican civilizations.

SS330S - World History: Colonialism

Why is English an official language of India? Why are there French islands in the middle of the Caribbean? These and many other examples are the legacies of colonialism, a chapter in world history where powerful countries expanded into massive empires. In this class, we will aim to understand how colonialism gave rise to many important relationships and conflicts of the modern world.

SS23S - World History: Middle East History

What could be more relevant than a course about the history, culture, and politics of the Middle East? This class will be an opportunity to try to understand all sides of recent and historical conflicts and to understand the pivotal role this region plays in world politics.

SS/LA27S - World History/World Literature: Renaissance

European Renaissance: The Tempest: Rather than survey the extensive history of early modern Europe, this class will assume a topical approach by presenting the Italian and English Renaissance period through William Shakespeare's brilliant play *The Tempest*. Using Shakespeare's play as a vehicle, we will analyze and explore the relationships and transformations of painting, geographical exploration, literature, and science in creating a new sense of *identity* in the Renaissance period. (See also *Language Arts*)

SS02S - World History: World Religions

This course will be dedicated to the study of religions around the world. Together we will investigate what a religion is and how religion affects individuals, cultures, and the world. We will also spend time comparing the similarities and differences between religions. A portion of the class will be spent studying the "Big Five" religions of the world: Hinduism, Buddhism, Judaism, Christianity and Islam. Students will also have the opportunity to research a religion of their own particular interest. Students will be expected to participate in class discussions and readings, submit written assignments and turn in a final project.

SS105S - World History: Violence & Social Justice

Throughout the course of the 20th century the phenomenon of genocide and mass violence became all too frequent. On every continent throughout the last century people have been excluded, segregated, degraded, publicly humiliated, lived in societies where anyone could be a spy working for a totalitarian government, subjected to systematic violence at the hands of the government officials, and ultimately been murdered in mass quantities based solely on a perceived difference or "otherness" from the group holding power. In this class we will examine the roots of some instances of mass violence, as well as learn about the events themselves. Finally we will consider any attempts at creating social justice and accountability in these different cases, and whether or not they had any lasting effect. This class will be looking at several different case studies, and students will also have the opportunity to work independently to research their own case study with the class.

Additional Social Studies Offerings:

AR08S Art & Psychology (*Please see Arts*)

LA/SS23S - World Lit: China and Japan History & Literature (*Please see Language Arts*)

WORLD LANGUAGE

FL51A - American Sign Language IA

This class is an introduction to American Sign Language. Students build vocabulary and focus on the basic shifts to ASL grammar. Students carry the thread of an ASL story, read simple conversation without the aid of hearing or speaking the human voice, and have a strong grasp of reading and signing all vocabulary words (a minimum of 1,000). They master the reception and production of the manual alphabet and shift conversations into silent mode to build reception and syntax. **Course fee: \$25**

FL51B - American Sign Language IB

This class is a continuation of ASL 1A. Examples of ASL 1A and 1B activities and projects include a biography on an influential Deaf person, an ABC Story, signing one's timeline, signing one's family members, signing a children's book, and signing a song among other activities and projects. **Prerequisite: ASL 1A Course fee: \$25**

FL52A - American Sign Language 2A

American Sign Language II furthers the study of grammar, vocabulary, idioms, multiple meaning words, finger spelling, classifiers through text, signing presentations, dialogues, cultural experiences, and supported written word. **Prerequisite: ASL 1B Course fee: \$25**

FL52B - American Sign Language 2B

This class is a continuation of ASL 2A. Examples of topics for ASL 2A and 2B are describing people, daily routines, giving directions, leisure time, food, animals, work and study. The final project for this class is to sign a detailed presentation about a trip to a zoo or equivalent. **Prerequisite: ASL 2A Course fee: \$25**

FL53AA - American Sign Language 3A

ASL3 will focus on conversational ASL and exploring Deaf culture. Students will learn to participate in exchanges, comprehend exchanges, and present on a variety of topics using familiar vocabulary and learned grammatical structure. **Prerequisite: FL52B Course fee: \$25**

FL53BB - American Sign Language 3B

ASL3 will focus on conversational ASL and exploring Deaf culture. Students will learn to participate in exchanges, comprehend exchanges, and present on a variety of topics using familiar vocabulary and learned grammatical structure.

Prerequisite: ASL 3A Course fee: \$25

FL71AA - Spanish IA

This practical, beginning class will emphasize an oral approach to expressions for situations commonly found in Spanish-speaking cultures. Reading and writing skills will be introduced through typical contexts in the culture. Speaking will be the focus of this course. Student-created mini-dramas and skits will be performed frequently. Topics include greetings, introductions, geography of Hispanic countries, descriptions of people/objects, present tense of basic verbs, locations, time, numbers, daily activities in and out of school, community, likes and dislikes, family, age, birthdays, professions and cultural information. **Course fee: \$25**

FL71BB - Spanish IB

This course is part two of the beginning level. Active oral communication will be encouraged, as well as the growth of reading and writing skills. Topics include clothing, asking/giving directions, giving orders, foods, daily routines, introduction of the past (preterit) tense, exchanging money, accepting/declining invitations, sports, physical condition, parts of a house, comparisons, and the present progressive tense, all within the cultural contexts of the Spanish language. There will be lots of pair and group work.

Prerequisite: Spanish IA at NVHS or another school. Course fee: \$25

FL72AA - Spanish 2A

This course introduces students to the intermediate level of the language. Now that the basics have been covered, students will learn about expressing favorite activities, shopping, possessions, the preterit (past tense), vacations, environment and diversity, comparisons, weather, directions, advising, commands, chores, and the introduction of the imperfect tense. Again, emphasis will be placed on oral communication. The goal is to increase confidence and enjoyment of the language. Cooperative learning will be the most important approach. **Course fee: \$25**

Requirements: Spanish 1B at NVHS or another school

FL72BB - Spanish 2B

This course is designed to develop the more sophisticated stages of listening, speaking, reading and writing competency in Spanish. Students will perform a variety of language functions: to list, ask questions, describe, give and follow directions, narrate, express and defend opinions, hypothesize, etc. Students will learn to perform in a multiplicity of contexts, for example: at home, in school, in the community, at work, when traveling, while shopping and while playing. Art and literature will also be examined. All tasks will be performed with an appropriate level of accuracy. Topics include: relative pronouns, subjunctive with conjunctions and with impersonal expressions, irregular past participle and past participle as adjective, passive voice, future imperfect subjunctive, probability, progressive imperfect, the conditional, and the pluscuamper-fecto. Guest speakers and community members will be invited so that students can practice the language in more authentic situations.

Prerequisite: Spanish 2A or enrichment courses

Course fee: \$25

FL73AA - Spanish 3A

This is a course for those students with a strong practical knowledge of the language and culture. Here students will expand their vocabulary and grammar acquisition to the point at which they can almost be easily understood by a native speaker. Students will be able to communicate more fluently in Spanish and have fun doing it. Some literature will be explored and lots of skits/performances will be practiced. Students will also learn through their peers by acting as student teachers for each other. Topics include: a deep review of topics covered in the past courses with the use of the subjunctive, the present perfect, "if" clauses, commands with direct and indirect object pronouns, the future, the conditional, and a list of more sophisticated expressions. Students will write to pen pals from Spanish-speaking countries and practice their grammar through the use of our Spanish CD-ROM.

Prerequisites: Spanish 2B and enrichment courses Course fee: \$25

FL73BB - Spanish 3B

This course is designed to develop the more sophisticated stages of listening, speaking, reading and writing competency in Spanish. Students will perform a variety of language functions: to list, ask questions, describe, give and follow directions, narrate, express and defend opinions, hypothesize, etc. Students will learn to perform in a multiplicity of contexts, for example: at home, in school, in the community, at work, when traveling, while shopping and while playing. Art and literature will also be examined. All tasks will be performed with an appropriate level of accuracy. Topics include: relative pronouns, subjunctive with conjunctions and with impersonal expressions, irregular past participle and past participle as adjective, passive voice, future, imperfect subjunctive, probability, progressive imperfect, the conditional and the pluscuamper-fecto. Guest speakers and community members will be invited so that students can practice the language in more authentic situations.

Prerequisite: Successful completion of Spanish 3A

Course fee: \$25