



Course Catalog

2024-25

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Academic Vision

Dare to Ascend

Founded on a Western ranch at the base of the Rocky Mountains, Fountain Valley School values hard work and fortitude as we empower students to stamp their own brand and write their own stories. We nurture curiosity while cultivating lifelong learners. We promote asking big questions and embracing analytical and creative thinking. We empower students to assume responsibility for their learning while finding purpose and joy in their accomplishments. These objectives join the college-preparatory goal of educating students to acquire the skills and knowledge needed to be successful in future academic and lifetime pursuits.

Introduction

This catalog includes the most up-to-date courses Fountain Valley School will be offering in the 2024-25 school year. Please make sure you read the following information carefully. As you look through the course catalog, please consult with your teachers and your advisor so that you select a course load that provides a balance of both rigor and performance.

As part of the course request process, teachers recommend courses for each student. As you make your course requests, please reference the School's graduation requirements, which may be found on page 4. If you have any questions about these requirements, please talk with your advisor. While students may change their course selections in the summer, once the daily schedule is created, it may be more difficult to then alter your selections.

Advanced courses are designed for highly motivated students who demonstrate the potential to complete college-level coursework. Advanced courses are taught at or above the Advanced Placement (AP) level with the option to take AP exams. Students need departmental permission to take an advanced or honors level course. Each department evaluates students based on their current performance, effort, mastery of course material, and commitment to learning. Department Chairs work closely with faculty and students to ensure proper course selection.

Before the end of the school year, students may appeal and apply for consideration to take honors and advanced courses for which they had not been recommended. Students in advanced classes can expect a greater load of summer homework they will need to complete before returning to school in the fall. Please note the School reserves the right to limit the number of honors and advanced courses a student may take.

Program of Study by Year

Grade 9

Five courses — one from: English, math, history, science, and world languages
FVS Chapter One: A Foundation of Mission, Mindsets, and Skills — fall semester
Visual or Performing Art — fall or spring semester

Grade 10

Five courses — one from: English, math, history, science, and world languages
Visual or Performing Art
Chapter Two: Sophomore Seminar — third quarter

Grade 11

Five core* courses, typically one from each discipline
Visual or Performing Art
Junior College Workshop — spring semester

Grade 12

A minimum of five classes that include at least four core* classes in the fall semester
Senior College Workshop — fall semester
A minimum of five classes that include at least three core* classes in the spring semester, not including Senior Capstone Project — spring semester, or Honors Capstone — fall and spring semesters, or Global Scholar Diploma — fall and spring semesters

**English, mathematics, history, science, and world languages*

Graduation Requirements by Department

Credits

20 credits, garnered among the School's departments, are required to graduate. A yearlong class is one credit, and a semester class is one-half credit.

English

4 credits in English.

Fine Arts

2025 and 2026 graduates: **1.5 credits** of art distributed across both the visual and performing arts.

2027+ graduates: **1.5 credits** of art in any visual or performing art are required. Students are required to take a semester of art in the 9th grade.

History and Social Science

2025 and 2026 graduates: **3.5 credits** including ninth-grade history, world history in 10th grade, United States History in 11th grade, and a history elective to be fulfilled in 11th or 12th grade.

2027+ graduates: 3 credits including The American West in the 9th grade, Modern World History for 10th graders, United States History for 11th graders; however, an elective history course is highly recommended in the 11th or 12th grades.

Mathematics

3 credits of secondary school math courses including the successful completion through Algebra II; however, the vast majority of colleges and universities require 4 years of math.

Science

2025 and 2026 graduates: **3 credits** in science, one of which must be in biology and one of which must be chemistry or physics.

2027+ graduates: **3 credits** of science including ecology in 9th grade, and then any chemistry or any physics course in subsequent years.

World Languages

2025 and 2026 graduates: **3 credits** with the successful completion of the third level of one world language.

2027+ graduates: **3 credits**, preferred in one world language.

Additional Graduation Programming and Required Credits

Successful completion of **Chapter One** (or **Chapter One Abridged** for students enrolled after their 9th grade year), **Chapter Two**, **Junior College Workshop**, **Senior College Workshop**, and one **Senior Capstone Experience** (Capstone, Honors Capstone, or Global Scholar Diploma), and completion of Interim each year a student is enrolled at FVS.

When choosing classes, it might be helpful to have a basic awareness of the recommendations of colleges and universities. Students with ambitions to compete at the D1 or D2 level should plan with NCAA eligibility requirements in mind. Students planning on applying to the U of California system or California State system should be mindful of “a-g” requirements. Students interested in pursuing pre-health or engineering in competitive applicant pools should seek physics and calculus or, at minimum, precalculus. We’d be happy to have a conversation with you at any point to weigh your options in context of the college admission process. Following are some general guidelines:

Subject	*FVS Graduation Requirements up to 2026	FVS Graduation Requirements for those enrolled in Fall 2023	State University such as CU Boulder ¹	Highly selective college ² and university ³ recommendations
English	4 credits	4 credits	4 years	4 years
Math	3 credits	3 credits	4 years	4 years preferably calculus
History and Social Science	3.5 credits	3 credits	3 years	3-4 years
Science	3 credits	3 credits	3 years (including 2-3 years of lab science depending on area of study)	3-4 years of lab science preferably physics, chemistry, ecology or biology
World Languages	Successful completion of a third level of one language	3 years of study in one foreign language; ELL course credits will count toward this requirement.	2-3 years (depending on area of study)	3-4 years or more of one language

FVS College Counseling Office

¹<https://catalog.colorado.edu/undergraduate/admissions/minimum-academic-preparation-standards/> These are fairly typical public university requirements, but students should check the admissions requirements at public universities of interest
² <https://www.davidson.edu/admission-and-financial-aid/how-to-apply/admission-policies/application-requirements> The recommendations here for highly selective colleges are typical—at least three years of the same language, math at least through calculus, additional rigorous courses in science and history

³ <https://admissions.yale.edu/advice-selecting-high-school-courses> Wise advice here—colleges are looking for rigor, dedication and intellectual curiosity, but there is room for specialization and personalization.

English Department

The English curriculum is based upon seminar-style classes and emphasizes reading, writing, analysis, and critical-thinking skills. The program balances studies in world, British, and American literature and relies upon representative genres to establish a foundation for further literary study, understanding, and appreciation. The writing process is emphasized at all levels of instruction and includes organization, effective argument, diction, and mechanics. Vocabulary study utilizes words within the context of readings, a study of Greek roots, and standardized test preparation. Advanced classes allow students to take the AP exam.

12th graders may take two electives one semester and then take none the other semester. Each fall semester senior elective will cover a unit on the college essay.

Grade 9

English I: A Literary Exploration of the West

Yearlong

In English I, students experience an introduction to literature primarily focused on Western America. They learn to read and question critically, think and write analytically, and discuss texts and themes communally. First Year students also study formal elements of grammar and syntax, while beginning to understand and utilize more elevated vocabulary. This course functions on an interdisciplinary level with First Year History, to form a First Year Humanities curriculum that seeks to make explicit links between cultures and literature. Readings invite students to investigate communities in and around the American West, including native inhabitants, immigrants, and those drawn by the lure of potential fame and fortune. Through discussions about our texts and themes, students should come to a deeper understanding of the environment that surrounds them and the deep history that is connected to the land.

Grade 10

English II: Place and Perspective

Yearlong

While reading classic and modern texts, sophomores will question and discuss how geography and natural settings help establish a sense of place. As the students examine the ways FVS and the western setting help create perspective, they will also expand outward to consider what it means to have a global sense of place. In examining the importance of nature and setting, the students build on the critical thinking skills they learn in their First Year by continuing to analytically read, write, and discuss various novels, short stories, poems, and essays. Students will also sharpen their vocabulary and grammar skills.

Honors English II: Place and Perspective

Yearlong

Prerequisite: Demonstration of mastery in previous course, excellent effort, teacher recommendation.

While reading classic and modern texts, sophomores will question and discuss how geography and natural settings help establish a sense of place. As the students examine the ways FVS and the western setting help create perspective, they will also expand outward to consider what it means to have a global sense of place. In examining the importance of nature and setting, the students build on the critical thinking skills they learn in their First Year by continuing to analytically read, write, and discuss various novels, short stories, poems, and essays. Students will

also sharpen their vocabulary and grammar skills. This honors class reads more texts and writes more papers than the other English II.

Grade 11

English III: American Literature: Journeys and Self-Discovery

Yearlong

American Literature will seek to answer the question “What is America?” as we journey through places and themes that have formed the foundation of our nation’s narrative. Structured around a geographic exploration of the country, the course will explore themes of race, gender, class, success, the trauma of war, and religion in settings that range from New York City to rural Wyoming. Students will encounter main characters who are wealthy socialites, working-class immigrants, war veterans, ranch girls, Native Americans, and emancipated slaves. Like Americans today, their identities are rarely simple; instead, they are defined at the intersection of the characters’ heritage, race, class, creed, and career. Students will walk away from this course with an enhanced understanding of the diversity of America as a landscape, a culture, and a national identity, complicating their view of what “America” is. The course simultaneously offers a skills-focused approach to writing instruction. Students will demonstrate their understanding through essay composition, dramatic performance, student-centric discussions, quizzes, and tests.

English III: Advanced English Language and Composition

Yearlong

Prerequisite: Demonstration of mastery in English II, demonstrated aptitude for writing and comfortable writing under time pressure, teacher recommendation.

Students enrolled in this course have the option of taking the corresponding AP exam in May. The objective of this writing-based course is to meet the goals established by the College Board course “AP English Language and Composition,” a course that mirrors first-year writing classes at the college level. To meet these goals, we will read and write various types of essays: personal pieces, argumentative writings about contemporary socio-political issues, essays in response to literary works, and also a contemporary issues research paper. Many of our writings will involve learning how to properly incorporate outside sources and, to prepare for the AP Exam, will be in-class, timed pieces. To coincide with FVS’s Junior-year study of American History and Literature, nearly all of our readings will come from American authors, and our argumentative writings will be focused on contemporary American social issues, policy debates, and politics. (*What differentiates this course from the Senior-year advanced literature course is the emphasis on writing, particularly on reading and writing argumentative, non-fiction essays.*)

Grade 12

Elective and Advanced Courses

English IV: Creative Writing

Spring Semester

What do you have to say? You are a senior and full of opinions, beliefs, and reflections. What will be your voice? This class will explore various voices and modes of writing, from non-fiction to fiction to journalism to poetry. We will read diverse books such as *The Practice of Creative Writing*, *I’m a Stranger Here Myself* (Bill Bryson), *The Solace of Open Spaces* (Gretel Ehrlich), and *On Writing* (Stephen King) while we write in different styles. The focus, in the end, will be on your writing and discovering your own voice.

English IV: Gods, Ghosts, Monsters

Spring Semester

In this course, we will explore a brief survey of things that will not die, that we cannot see, that we do not understand. What makes a monster? What makes a god? Why are we afraid of ghosts? What really makes a house haunted? And why are we so obsessed with vampires? We will compare classical gods and modern-day god complexes, metaphors for oppression and oppression itself. Through Greek and global mythology, various Classical, Early Modern, and Gothic literature, modern and contemporary fiction and essays, movies, and more, we will confront human fears and the fictional world that reflects them.

English IV: Into the Unknown: Literature of Climbing and Mountaineering

Fall Semester

Adventurers have long asked the question: Why do we climb mountains? Their answers have been as widely varied as the routes they climb. This class will focus on the literature of mountains, climbing, and pushing our limits. We will read accounts of adventure, stories of those who call the mountains home, and tales of Colorado's own 10th Mountain Division. We will consider ethical dilemmas, potential risks and rewards, and the challenges that must be overcome to achieve greatness. Ultimately, we will seek to answer the question: "Why do humans seek out wild places above the clouds?"

English IV: Jazz Poetry to Confessionalists: A Survey of Postmodern Poetry

Spring Semester

During the middle of the 20th century poets challenged prevalent assumptions and styles and began experimenting with poetry that was intended to be subjective, sometimes deeply personal, and unconventional in form and content. In this course, we will trace the outlines of postmodern poetry by sampling a wide variety of work and focusing on a few specific movements and groups of poets: jazz poetry, the Black Mountain Poets, and confessionalism. In addition to enjoying and interpreting the poems, we will attempt to extract a deeper understanding of the societal forces that shaped the movement.

English IV: Mainstream U.S.A—Modern Media and Literature

Fall Semester

Formerly titled **Identity in the Digital Age**

This course serves as an introduction to the interdisciplinary field of media studies through the lens of modern and contemporary American literature, history, and culture. We will question how dominant cultural narratives get created, especially via politics and pop culture consumption. Through critical and creative nonfiction, novels, television, films, and music we will critique the fashions, celebrities, technology, philosophies, wars, and discriminations of the 20th and 21st centuries, but particularly of the recent past, centering the 1980s, 1990s, and 2000s. Some American narratives we might study: convenient generational categories (e.g., Boomers, Gen X, and Millennials); the suburbs and sitcoms; Ronald Reagan, AIDS, and the War On Drugs; hip hop, pop, and punk music; blogging and confessional literature; the digital revolution; pop psychology and media literacy.

English IV: Writing From Within

Fall Semester

This class focuses on crafting the college essay and other types of nonfiction writing. Students read various modes and styles—from the profile to the argumentative, from the investigative to the memoir. Students often write short pieces and read from the works of John McPhee, David Foster Wallace, Diane Ackerman, E.B. White, and Simon Rich, among others. Students receive a subscription to *The New Yorker* magazine. This class may take field trips to provide material for these modes of writing.

English IV: Advanced English Literature and Composition Fall and/or Spring Semesters

Prerequisite: Demonstration of mastery in Advanced English Language and Composition or previous English course, demonstrated aptitude for reading, analyzing, and discussing challenging prose, demonstrated ability to write under time pressure, teacher recommendation.

Students enrolled in this course have the option of taking the corresponding AP exam in May.

Advanced English Literature is a college-level seminar course that encourages highly motivated readers and writers to explore challenging and diverse literary offerings, while preparing for the AP exam in English Literature. Advanced English Literature begins with a review of the summer reading texts, then focuses on important authors and poets from around the world: Shakespeare, Woolf, Erdrich, Faulkner, Roy, Garcia Marquez, Chekhov, and Sophocles among others. These works are complemented and contextualized by historical study and referencing literary theory, from Aristotle to Derrida. Readings and discussions are organized around each author's contribution to the course's essential question(s): what does it mean to tell a story – to tell our own story – and how does the manner in which stories are told indicate their content. In-class essays complement formal out-of-class essays and are a significant part of students' work in composition. Additionally, students ought to expect to be leaders of the classroom environment and will do so formally through presentations and Socratic Seminars, among other activities.

**Students may enroll in both semesters, with the second semester focusing on different texts.*

While students need a recommendation for this course, fall semester is not a prerequisite for the spring semester.

English IV: Classics for the Ages (NOT OFFERED in '23-'24) Fall Semester

As time passes and more books pour out of the printers and onto our bookshelves, some of the world's greatest classics develop dust and fade from our thoughts. With this class, we will step into the past and give attention to some of the dearest and most influential pages that have ever been written. Along with close reading and lively discussions, we will seek to diagnose the qualities that separate these books from the countless forgettable novels in the world. At the end of the semester, the students will work to transform one of the novels into a children's rendition, taking care to capture those quintessential qualities from the originals in their new versions. Depending on the novel they choose, they will focus on a section or chapter for this project. Through this process, they will help reimagine a classic appropriate for all ages. Authors could include: Charles Dickens, Leo Tolstoy, Louisa May Alcott, and Bram Stoker

English IV: The Narratives of Conflict (NOT OFFERED '24-'25) Spring Semester

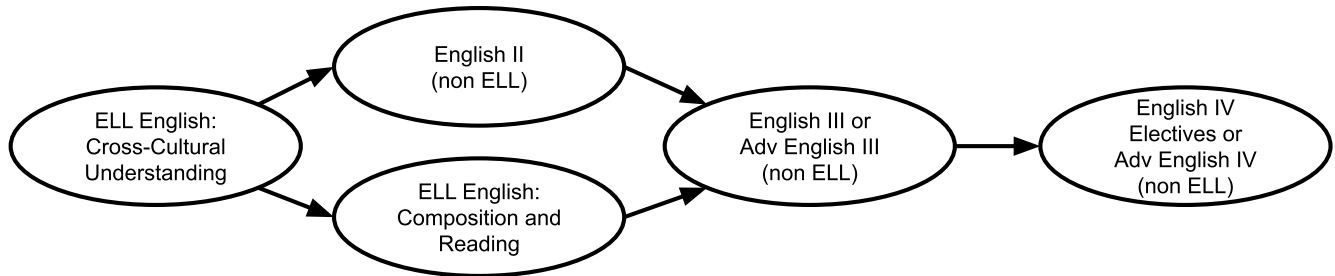
Course Credit: This class can also be taken for a history credit.

How we come to make sense of conflict is often through what we see and whom we listen to. In this course, we will widen our perspective of war and conflict by analyzing a variety of mediums to corroborate accounts from civilians, victims, soldiers, combatants, and leaders. We will seek to understand the impacts of conflict on the individual by examining the characteristics of war, how it is presented, and how art is a means to process and prevent conflict. Readings of short stories, poems, letters, memoirs, and novels will be paired with cartoons, interviews, documentaries, films, musical compositions, and guest speakers as a way to examine the complexities of conflict through multiple lenses. Some key conflicts we will closely examine are World War I, The Vietnam

War, and The Bosnian War.

English Language Learners (ELL) Program

The English Language Learners Program's goal is to support academic and social language proficiency skills needed for students to be successful in the mainstream FVS classroom. While English language learners must meet Fountain Valley's full academic requirements for graduation, the sequencing of courses is adjusted to accommodate individual preparation levels. The ELL Program maintains a flexible approach in adjusting to the needs of the students in the program.



English Courses

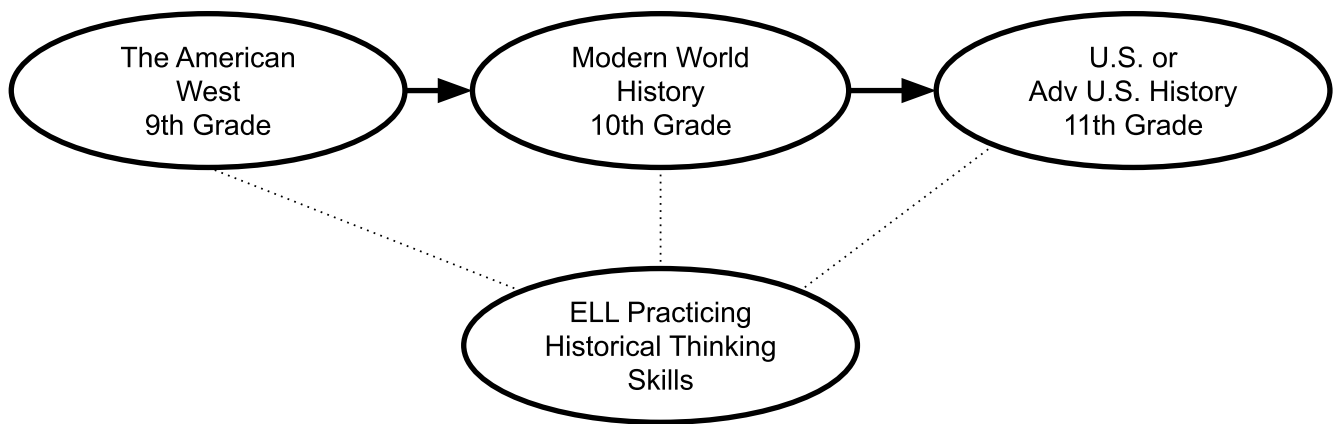
ELL English: Cross-Cultural Understanding

Yearlong

This one-credit course prepares the intermediate English language learner to successfully analyze written material and compose analytical and descriptive essays. This course meets every day, with every other class session serving as required instructional support. The student reads several short novels and selected short stories each semester, develops writing skills from the cohesive paragraph to the complete composition, and continuously increases vocabulary. The course has a balanced emphasis between expressive and receptive language. Speaking and listening skills are honed while investigating cultural similarities and differences between the United States and the student's own country.

ELL English: Composition and Reading

This one-credit class prepares advanced English language learners to participate in mainstream English courses. Students refine their English writing skills by practicing narrative, descriptive, and expository writing. Students will also expand their English vocabulary through verbal and written responses, and by reading and discussing works of fiction, nonfiction, and poetry. Works studied are chosen with a view toward engaging student interest, as well as in alignment with mainstream sophomore and junior English course content in order to prepare students to fully participate in mainstream English after they successfully complete this course's requirements.



History Course

ELL History: Practicing Historical Thinking

Yearlong

This course is not for credit, and therefore not on official college transcripts. This course pairs with the ELL student's yearlong history class, and is required for students who are currently enrolled in ELL English courses.

This class prepares and supports English language learners as they further develop their historical thinking skills in order to accelerate the option of taking advanced history classes sooner. This class works in tandem with the student's current history class, and this course serves to deepen and reinforce ELL students' understanding of the historical events they are learning in their other courses. Students further refine their analytical writing skills and close reading skills of scholarly texts and primary sources in English .

Fine Arts Department

Learning opportunities extend to all levels of experience in the fine arts, jewelry / metalsmithing, acting, photography, filmmaking, choral, and instrumental music. Introductory level classes provide a foundation for subsequent focused study in specific disciplines. Three annual theater productions, student art exhibits, and choral and instrumental performances are among the many opportunities for students to showcase their work. 9th graders are required to take a semester of fine arts during their first year.

To learn by doing is the basic approach of the fine arts department. The focus is on developing both aesthetic literacy and technical skills that are the cornerstone of artistic work. The program strives to build confidence and exposure to various artistic skills and mediums in order to develop a sense of personal creativity.

Performing Arts

Instrumental

Orchestra and Ensembles

Fall and Spring Semesters

Prerequisites: At least three years of direct instruction, previous band and/or orchestral experience and/or approval from the director. Admittance in this course includes an audition for new students during the first week of class.

This course gives the highly committed instrumental music student the opportunity to learn and perform concert music spanning a wide range of styles and historical periods from the beginning of time to present day contemporary compositions by living composers. The Fountain Valley Orchestra includes winds, brass, strings, and percussion. If a student wishes to pursue making music in a collegiate orchestra or chamber music setting, this course will help pave the way.

Jazz & Rock Ensemble

Fall and Spring Semesters

Prerequisites: At least three years of private instruction or self study, previous band experience, and/or approval from the teacher. Admittance in this course includes an audition for new students during the first week of class.

In this course, students form a band and explore many different jazz and rock genres. Independent musicianship is developed through engaging deeply with musical improvisation. Musical elements of balance, texture, phrase, color, rhythmic clarity, and groove will be explored in depth through the learning of familiar and unfamiliar songs from the jazz and rock genres. Students are given the opportunity to write music for their group. Daily practice and public performance is a requirement of this course.

Music Production

Intro to Music Production

Fall Semester

In this course, we will explore the basic elements of sound recording & miking techniques for acoustic & amplified/electronic instruments as well as found sound, basic mixing and mastering/editing, basic sound design, and compositional techniques using a standard digital audio workspace (Logic, Garageband), and creating music/soundscapes for film. This class will also have a very robust entry level musicianship/ear training component.

Music Theory and Composition I

Fall Semester

Prerequisite: Must be able to read music or have teacher approval. Basic keyboard skills are beneficial.

This course fosters personal creative freedom and deepens understanding of the elements of the fundamentals of music theory and music composition. The course covers concepts and theories related to aspects of sound, rhythm, harmony, melody, musical syntax, and part writing as well as musicianship skills and improvisation. This course prepares students for Music Theory and Composition II.

Music Theory and Composition II

Spring Semester

Prerequisite: Music Theory & Composition or a passed aural skills & theory entrance exam to be given during the first two weeks of class.

The purpose of this course is to foster personal creative freedom and to gain new skills, curiosities about, and understanding of the elements of music composition regardless of a student's preferred styles or genres. While this course will be one in which music theory knowledge will continue to grow, the main component of this course is music composition. A wide range of musical genres will be explored in order to widen and enrich the student's contextual perspectives in order to give more to draw from while composing their own work. Improvisation on a primary instrument or voice will be a core learning activity in this course for the development of the independent creative musicianship that is integral for music composition. Music history, aural skills, and score analysis will also be explored.

Theater

Theater I

Fall and Spring Semesters

The Theater I technique class will have an in depth study of mental acting practices with brief chapters in vocal and physical theater practices. Students will perform monologues and duets while confronting human thought process and switching tactics. They will discover their most engaging physical stage presence and vocal techniques. Between monologue and duet performances, they will explore stage combat, Suzuki theater, Improvisational acting and several other practices.

Theater II

Fall and Spring Semesters

Prerequisite: Theater I.

Theater II is for the student who wishes to go further with their studies from Theater I and is highly recommended for those students wishing to pursue larger roles in the after school theater program. Theater II is often where the actor truly blossoms into lead role material. While Theater I is about learning the skills themselves, Theater II is about honing those skills and becoming able to execute them with ease onstage. Summative grades consist of duet and monologue performances, while daily grades are made up with homework assignments, memorization and in class participation.

Theater III and **Theater +**

Fall and Spring Semesters

Prerequisite: Theater I and II and teacher approval.

Theater III and beyond is a joint advanced class that is run similar to a college scene study course. Students interested in our afterschool program should stay enrolled in theater for these advanced courses to expand their character range, hone their mental, vocal and physical skills, and to become the most empathetic and engaging actors as possible. Students will delve into modern

theater and the latest Pulitzer Prize-winning plays to choose the scene selections that will evoke the most educational class discussions on human thought process. Summative grades consist of duet and monologue performances, while daily grades are made up with homework assignments, memorization and in class participation.

Vocal

Concert Choir

Fall and Spring Semesters

This performing ensemble focuses on the enjoyment of choral singing with an emphasis on vocal technique, basic music theory skills, and style interpretation. Students rehearse and perform music from a variety of different genres, focusing on performance practice and note reading. The overall emphasis is on improved signing qualities and advancement of individual skills in the ensemble setting. Public performance is required.

Select Ensembles

Spring Semester

Prerequisites: must have participated in a choir for at least one year. This course requires an audition the first week of class.

Throughout this course we will look at varying vocal repertoire. Depending on the group this could look like solos, duets, trios, or full ensemble works. We will cover a variety of genres as well, also dependent on the group. Genres that could be covered include musical theater, madrigals, classical, and pop. Students will explore their voice and learn skills that will improve their level of singing. This course will be a performance based course and students should expect to perform the music they are working on in class for the community or a variety of outside concerts.

Visual Arts

2D Art Courses

Painting & Drawing

Introduction to 2D Techniques

Fall and Spring Semesters

Introduction to 2D Techniques is an introduction to a variety of studio media. The course covers the foundations of observational drawing, perspective, and color theory. Units are broken down by processes such as drawing (pencil, charcoal, pastels, ink), painting (watercolor, acrylic), and printmaking (linocuts). All students must participate in peer critiques and participate in the final art show at the end of the semester.

Inspired by Nature

Fall Semester

Inspired by Nature is an experimental 2D class with multimedia projects included. Processes include, but are not limited to printmaking, drawing, paper making, creating and working with natural dyes and materials such as willow. The class will utilize the natural resources from FVS's prairie. Students will learn through investigation, experimentation and observation. FVS's natural surroundings will become a second classroom and the main focus of inspiration.

Multi-Medium Introduction

Spring Semester

In this class, students will explore a variety of mediums, techniques and concepts ranging from printing methods, fiber work, installations, use of found objects, light and paint. Students will examine the various techniques unique to a particular media while also exploring the opportunities to play with and produce mixed-medium artworks that play with ideas of form and content.

Studio Art II

Fall and Spring Semesters

Prerequisite: Studio Art I or Introduction to 2D Techniques.

This course is available to art students who have completed Intro to Studio Art or its equivalent. Each successive semester offers the student the opportunity to work in an increasingly independent fashion and in more advanced techniques. Students have the choice of working with the full range of available 2-D studio media with varying technical instruction in painting, drawing, printmaking, mixed-media, digital and other art media. All students must participate in peer critiques and participate in the final art show at the end of the semester.

Honors Studio Art III+

Spring Semester

Prerequisites: Studio Art II and another art class of a different medium + teacher recommendation.

The honors level studio art course is designed for students seriously interested in continuing in studio art. Students work more independently and explore more advanced techniques. Students have the choice of working with the full range of available 2-D studio media with varying technical instruction in painting, drawing, printmaking, mixed-media, digital and other art media. All students participate in peer critiques and participate in the final art show at the end of the semester.

Photography & Videography

Alternative Photography

Fall Semester

Students in Alternative Photography will be guided through a collection of non-normative photographic practices. Pinhole camera production and use, cyanotypes, multiple exposure photography, and Digital Manipulation are just a few of the many methods we will explore, challenging them to consider what the true nature of photography really is. Get back to the roots of photography where science meets magic in this exciting exploration of processes!

Darkroom Photography

Fall and Spring Semesters

This course serves as an introduction to photography with the primary emphasis placed on the effective use of film cameras and darkroom techniques. Students learn to use film cameras, develop film, and print images in the darkroom. Some of the photographic concepts that are explored include depth of field, composition, and portraits. Emphasis is placed on the expressive and creative qualities of photography as a communicative art form.

Digital Photography

Fall and Spring Semesters

This course serves as an introduction to digital photography with the primary emphasis placed on the effective use of digital cameras and learning appropriate digital darkroom techniques. Some of the photographic concepts that are explored include color theory, flash vs. natural light, and documentary photography. Emphasis is placed on the expressive and creative qualities of digital photography as an art form.

Photography Workshop

Spring Semester

Prerequisite: Darkroom Photography or Alternative Process and Digital Photography.

Photography Workshop builds off of the conceptual work students begin exploring in the darkroom and digital photography courses. Each student will be challenged to complete an exploratory photographic experiment in a higher level process of their choosing, giving them an opportunity to delve into uncharted territory. The culmination of the course is a 10-15 image series built off of a conversation of the student's choosing. The course allows students a window into the working process of a fine art photographer, and is an excellent opportunity for building college level portfolio work.

Introduction to Video

Fall Semester, Odd years

Intro to Video is a course designed to give students a survey of the range of different applications of the moving image as well as production techniques. Throughout the term, students will work with cell phones and camcorders to produce projects ranging from advertisements and music videos to documentary and art film. They will also be introduced to editing techniques using Adobe's Premiere Pro. The culmination of the course will be a final self defined project utilizing the concepts and techniques studied throughout the term.

Narrative Filmmaking

Spring Semester, Even years

Prerequisite: Introduction to Video.

Narrative Filmmaking is a course designed to give students a crash course in the process of visual storytelling through film. Each student will build their filmic toolkit through a variety of production driven assignments including a chase scene, a western inspired standoff, and an interrogation. Students will also learn to edit their own video using Adobe's Premiere Pro. The culmination of the course will be a collaboratively produced short film, and each student will be challenged to edit their own final cut. Come make a movie!

3D Art Courses

Ceramics & Metals

Ceramics I

Spring Semester

Ceramics I is designed to help the beginning student become more aware of the potential of clay as a vehicle for self-expression. Students create forms that may serve practical needs, yet have the mark of vitality and individuality. Students learn the basic handbuilding techniques that will give them a foundation to grow from. The elements of art and principles of design are used to help students gain a better understanding of design concepts and to help them self critique.

Pottery I

Fall Semester

Pottery I will cover beginning and intermediate techniques in wheel throwing. Students will learn to create functional ware while working on the potter's wheel. Pottery one students start by learning to throw basic cylinders and then expand from there. Additional Pottery I projects include bowls, pitchers, vases, plates and basic glazing techniques.

Sculpture

Spring Semester

Sculpture explores the endless possibilities of working with and creating three dimensional work. Students learn the basic language and techniques associated with sculpture. Students create work that addresses scale, context, figurative, and material language. Mixed media, found objects, metal, wood, plaster and clay are some of the materials the class works with. Clay modeling, welding, assemblage, installation, public/outdoor sculpture are some of the techniques and themes that may be covered in the class. There are individual and group projects. The elements of art and principles of design are used to help students gain a better understanding of design concepts and to help them self critique.

Metalsmithing I

Fall and Spring Semesters

Metalsmithing I is available to beginning students who wish to explore a variety of traditional and contemporary forming and finishing techniques associated with jewelry design and metal fabrication. Using silver, copper, nickel silver, and brass as the primary materials, students learn soldering, overlay, enameling, casting, stone setting, and cold fabrication techniques that are used in the design of original works of art.

Metalsmithing II

Spring Semester

Prerequisite: Metalsmithing I.

Metalsmithing II is available to those students who have completed Metalsmithing I and desire a more intensive and independent opportunity to explore jewelry design and metal fabrication. Students are introduced to hinge-making, forging, lapidary, etching, casting, hollow construction, and sculptural construction. Metals III students continue to develop the skills needed to pursue a wide-range of metal forming and finishing techniques, but the primary area of focus will be on the development of a body of work that explores a particular area of interest and concept.

Art History

Art History: From Cave to Canvas

Fall Semester

This course is a survey of art styles, methods, and movements from the earliest cave paintings up until the early 19th century. From the ancient Assyrians to the high renaissance and beyond, students will explore how cultures produced and appreciated art as well as how they can

interpret these works in an evolving world. Students will dive deeper into topics through research, group projects, and working in some of the practices discussed. If you are curious about art, or just want to get a better sense of what you're looking at in museums, this course is perfect for you. Students Enrolled in this course will also gain priority selection for the Art History Interim.

Art History: Contemporary and Modern Art

Spring Semester

This course offers students a depthful view into the wild world of modern and contemporary art. Ever been confused why a splatter painting or an all white canvas is in a major museum, or perhaps how an artist got a shovel purchased in a hardware store acknowledged as a piece of fine art? Well this is the course for you! Students will explore styles, movements, and artists that have dramatically changed the landscape of the art world over the past several hundred years. Students will dive deeper into topics through research, group projects, and explorations of mediums. Students Enrolled in this course will also gain priority selection for the Art History Interim.

Ceramics II Sculpting With Clay (NOT OFFERED in '24-'25)

Spring Semester

Prerequisite: Ceramics I.

Ceramics II Sculpting With Clay is for students who desire a focused opportunity to explore sculpture with the medium of clay. Advanced sculpture techniques are explored along with a more indepth dialogue around form, shape, texture, and concepts. Projects may include a bust, slip casting, and large scale murals. Students will also become more versed in the multitude of glazing and firing processes utilized within the ceramics program.

Art in The American West (NOT OFFERED in '24-'25)

Spring Semester

Art in The American West is an art history survey for First Year Students on how art has not only been practiced in the American West, but how The West has been portrayed and romanticized throughout history. Students will explore indigenous styles and practices, how dominant cultures have explored and portrayed the peoples and landscape, as well as how the narratives of western expansion have played a role in painting a picture of what the west is and has become.

History and Social Science Department

Fountain Valley School treats history in the broadest possible sense as the study of all aspects of peoples through the past, both distant and recent. The program aims to instill in students an understanding of the rich variety of the human experience regionally, nationally, and internationally. The department is committed to historical accuracy, which recognizes the importance of the variety of experiences and perspectives that exist in human history and that the present is the result of historical processes and events.

The history program is committed to an extensive and varied writing experience. Historical writing takes many forms, from argumentative and analytical to expository and creative. Assessment is not limited to formal essays, but also includes project- and problem-based units, collaboration and reflection, classroom engagement and dialogue, and other formats that capture students' imaginations, challenge simplified historical narratives, and breathe life into the past. Through all classes, historical and critical thinking skills are emphasized, alongside skeptical analysis of primary and secondary sources, journalism, and multimedia.

Grade 9

The American West

Yearlong

This course embarks on a thematic study of the history and development of the American West through varied lenses and perspectives - from the impact of westward expansion on Indigenous peoples to examining the federal laws that still shape the West today. Through the emphasis on academic skills and historical thinking, students will deepen their "sense of place" at Fountain Valley, uniquely located where the prairie meets the mountains. Throughout the year, students develop and hone their critical thinking, research and writing skills, as they collaborate with their peers during class discussions and activities. This class will culminate with a student-directed investigative and multifaceted project in May.

Grade 10

Modern World History

Yearlong

Modern World History focuses on the cultural, technological, social and political growth of human civilizations from their rise in ancient river valleys through events in the twentieth century. The objective of this class is to help students understand how the peoples, cultures, religions, political systems, regional interactions and trade networks in the world came to be. Students are asked to evaluate historical materials, weigh evidence, and develop critical thinking skills. Throughout, students are encouraged to ask probing questions and make connections to the modern world. How are situations and regions today reflections of the past? Students use a wide range of both primary and secondary sources in their studies from multimedia and journal articles to first-hand accounts and period artwork. In addition to traditional tests and quizzes, presentations, debate, writing and discussion are all emphasized methods of assessment.

Advanced World History

Yearlong

Prerequisite: Demonstration of mastery in previous history course; teacher recommendation and teacher evaluation of student writing.

Advanced World History is designed to help students develop a greater understanding of the evolution of global processes and the interactions between people in different types of human

societies. Students gain understanding of world history through learning knowledge and using analytical skills to examine varying types of historical evidence from multiple perspectives. Focusing on the past 1,000 years of global experience, the course builds on an understanding of cultural, institutional, and technological precedents that serve as the foundation of the modern world. Continuities and changes over time and place, comparisons of societies and situations, and document-based evaluations of issues are all heavily emphasized. Students are expected to fully participate in class dialogues, complete collaborative projects, and create multimedia presentations in addition to critical writing and content assessments.

Grade 11

United States History

Yearlong

This course integrates interdisciplinary study with a thematic approach to the history of the United States from pre-contact Indigenous societies to the present day. Students examine how history and culture reflect the evolution of America as it wrestles with its identity, race relations, religious and ethnic diversity, gender studies, the successes and failures of democratic capitalism, fights for civil rights and the rise of the U.S. as a world superpower. With an interpretive and analytical perspective, the class explores primary and secondary sources and multimedia, conducts research, and reads, writes, debates and produces a wide range of materials related to important and topical issues that characterize American history from a variety of perspectives.

Advanced United States History

Yearlong

Prerequisite: Demonstration of mastery in previous history course; teacher recommendation and teacher evaluation of student writing.

Students enrolled in this course have the option of taking the corresponding AP exam in May. Students who choose not to take the AP exam will complete a final project instead.

A chronological course, Advanced United States History surveys American history from the time of the first significant European contact with Indigenous Peoples to the present, preparing students to take the AP exam in May. Students read a demanding college-level text, write interpretive essays, work with primary documents and produce a short paper or two focusing on a theme from the 19th or 20th centuries. In addition, students are responsible for reading and outlining the first unit of the text over the previous summer, as the course leaps right into the American Revolution in September and covers the entire curriculum before the exam.

Grades 11 and 12

Elective Courses

Election 2024

Fall Semester

This 12th grade course will immerse students in the essential elements of electoral politics leading into the 2024 presidential election. In addition to diving into the hot topics most on voters' minds (nationally and regionally), students will examine the factors leading to America's current hyperpartisanship and the outsized role of media and money. Students will not only examine the 2024 election; they will dive into the historic role of presidential elections and politics in American culture through film studies, the production and critique of political advertising, and the creation of original student editorials, speeches, and multimedia artwork reflective of the 2024 election.

Honors History of the Modern Middle East

Fall Semester

Prerequisite: Teacher recommendation.

This course examines the emergence of the Modern Middle East from the Ottoman Era to the present. We will begin by examining nineteenth century institutions and considering Middle Eastern political innovations during the late 19th century, especially those rooted in the emergence of nationalism and transforming expectations for the relationship between governments and the people. By focusing upon these two transformations and tracing them through the twentieth century, this course will examine the impact of colonization, World War I, Palestinian and Israeli nationalism, secular ideologies such as Arab nationalism and socialism, Nasserism, Islamism, and political revolutions in the region. Students will explore a wide array of source material including articles, literature, film, music, and digital archives.

Sports and Society

Spring Semester

This course explores and examines how sport at all levels both reflects and resists societal structures and pressures. We will explore the intersection of sport with race, gender, class, and national identity and examine the role of politics, economics, and media in shaping sport. We will be considering the experiences of both those who play sport and those who consume it. Students will interact with a variety of sources and methods including documentaries, media and journalism studies, oral history, and traditional research. Topics studied include the Negro Leagues, 1968 Olympics, Title IX and the links between sports and the military. While the focus of the course is on the role of sport in the United States from the late 19th century to the present, we will spend some time considering the impact of sport globally as well.

Advanced Microeconomics

Fall Semester

Prerequisite: Teacher recommendation.

This course will introduce students to the fundamental concepts of microeconomics, the history of economic thought underlying those concepts, and their application to current issues as they apply to individual decision-makers such as households and firms. Topics covered will include supply and demand, market structures, and behavioral economics. Students will also explore current events and recent research in economics and will apply their knowledge in a series of debates and response papers throughout the term.

Advanced Macroeconomics

Spring Semester

Prerequisite: Teacher recommendation.

This course will introduce students to the fundamental concepts of macroeconomics, the history of economic thought underlying those concepts, and their application to current issues. Topics covered will include economic growth, fiscal and monetary policies, and international trade. Students will also explore current events and recent research in economics and will undertake their own economic research throughout the term.

Advanced United States Government & Politics

Spring Semester

Prerequisite: teacher recommendation. Students enrolled in this course have the option of taking the corresponding AP exam in May.

Because this is a fall elective and the AP exam is in May, students will need to complete work independently and outside of class to be successful on the AP exam.

This advanced-level semester course provides students with the knowledge of government and politics necessary to participate meaningfully in discussion, analysis, and exploration of the contemporary American political climate. Polarization, money, recent presidential elections and

the pendulum swings in Congress and the Supreme Court provide plenty of drama for students to engage with! Acting like political scientists, students will employ healthy skepticism and inquiry by framing their studies around enduring values and big questions about American government and politics, such as, 'what is freedom?' 'Is the Constitution still relevant in today's world?' And, 'how does the government really work, and for whom and what interests?' Media studies and current events will play a central role in this course; students are expected to keep up with political developments and major news stories and be ready to engage with such material daily.

Honors History of Hate and Tolerance (NOT OFFERED '24-'25)

Fall Semester

Demonstration of mastery in previous history course and teacher recommendation.

This course will closely examine the historical origins of islamophobia and antisemitism and how it manifests in our regional community and in the United States today. The intent of this class is to apply a proactive approach to combating these ideologies in our broader communities, by developing a greater understanding of the processes that fuel prejudice and persecution. We will examine the 10 stages of genocide, and use the Holocaust as a case study. This class will work with the Pikes Peak Interfaith Coalition, and we will visit the local mosque and synagogues in Colorado Springs. Students will be expected to host Unity Day workshops (now in the fall) on these topics as a way to demonstrate their learning and promote tolerance in our FVS community.

Islam and the West (NOT OFFERED '24-'25)

Fall Semester

This course is designed to expose students to various perspectives of the world of Islam and how it affects and is affected by the West. Students will investigate the cultural, religious and political dimensions of the interaction between Islam and the West at several historical moments. The aim is to go beyond superficial characterizations of Muslims and to understand the nuances of their beliefs, traditions and behaviors. Students will attempt to gain a better understanding of the rhetoric regarding "Islam" and "the West" and the interest this rhetoric has served.

Economy, Society, and Public Policy (NOT OFFERED '24-'25)

Fall Semester

This course is designed to provide students with a basic fluency in economic thinking as it applies to public policy. Throughout the course, students will learn how to use economics to understand and articulate reasoned views on some of the most pressing policy problems facing our society: environmental sustainability, inequality, the future of work, financial instability, wealth creation, and innovation. By the end of the course, students will be literate in fundamental economic principles, understand the limits of economic theory and free markets, understand the role of government intervention in the economy, and make informed policy recommendations by analyzing and evaluating public sector policies.

Contested Values, 1945-1990: Competing for the Soul and Identity of America (NOT OFFERED in '24-25)

Fall Semester

The United States emerged from World War II triumphant, cementing the 20th century as "The American Century." But what defined post-war "America?" Was America the Western world's sole hope for freedom--God-fearing, the "shining city upon the hill," resolute in its democracy in the face of spreading Communism? Or was America the quintessential hypocrite, with "all men are created equal" undermined by racial segregation and violence, gender discrimination, class tension and environmental destruction? Through primary and secondary source materials, film studies, deep dives into pop culture, research, and dialogue, students will examine these competing narratives as they connect the dots from the major movements and events of the latter half of the 20th Century to the contemporary United States of today.

Illuminating the Dark Ages (NOT OFFERED '24-'25)

Fall Semester

"The Dark Ages" in Europe have been typically understood as only being representative of either the catastrophic results of the fall of the Roman Empire or as the lowly foundation for the eventual formation of nation-states in Europe. This class, in contrast, will highlight that neither of these narratives does justice to this time period. The Dark Ages are termed as such because people often view it as a period where Europe was devoid of cultural life and growth and shut off from the rest of the world. In reality, however, Europe was intricately attached to the larger Eastern and Mediterranean world. In this class we will use a variety of source material, both primary and secondary, in order to uncover the complex phenomena that influenced the world of Europe in the 5th to 14th century. The fact that for large chunks of this time period we have little source material, means that we will need to rely on our creative historian skills to uncover the narrative of the Dark Ages. The Dark Ages deserve to be studied on their own, separated from the narratives that have primarily framed it in the past, and in this class we will bring light to the supposed darkness of this age.

The Population Paradox: Boom, Bust, and Implications for Our World (NOT OFFERED '24-'25)

This elective seminar course is designed around the principles of human geography and global demographics. We will study the evolution of human population growth focusing on the paradigm of 'panic' during the 1960s and 1970s; "The Population Bomb", to the issues surrounding declining growth rates of the 1990s into the present day. We will consider the effects of over and under population upon human existence and the extent to which both governmental and personal solutions have been successful. We will also take a deep dive into the effect of human population growth upon climate and the consequences of the COVID 19 pandemic. The course will use resources from leading journals and publications as well as "scholarly" material. We will culminate with a self-guided investigative paper at the end of the semester.

Honors Philosophy: "The Good Life" and The Foundations of Fulfillment (NOT OFFERED '24-'25)

Spring Semester

What makes a life "good"? Is it what you do for others? The acquisition of wealth and prestige? Religious piety? Or simply just "pursuing happiness?" These inquiries swirl around our consciousness, and push us towards our various goals and dreams. Thus, it is essential that we approach the question, "What is the good life?" with earnestness and energy. In order to address this query, we will interact with a myriad of philosophical, religious, and ethical thinkers who attempted to answer this question in their own unique way. We will travel from the 5th Century BCE when Lao Tzu was expounding upon fundamental questions in the Tao Te Ching to the 21st century where thinkers such as Alasdair MacIntyre and Nel Noddings continued this tradition. This class will provide you with the philosophical, intellectual and historical resources required to continue deciphering this ethical puzzle as you progress through life.

The Narratives of Conflict (NOT OFFERED '24-'25)

Spring Semester

Course Credit: This class can also be taken for an English credit senior year.

How we come to make sense of conflict is often through what we see and whom we listen to. In this course, we will widen our perspective of war and conflict by analyzing a variety of mediums to corroborate accounts from civilians, victims, soldiers, combatants, and leaders. We will seek to understand the impacts of conflict on the individual by examining the characteristics of war, how it is presented, and how art is a means to process and prevent conflict. Readings of short stories, poems, letters, memoirs, and novels will be paired with cartoons, interviews, documentaries, films,

musical compositions, and guest speakers as a way to examine the complexities of conflict through multiple lenses. Some key conflicts we will closely examine are World War I, The Vietnam War, and The Bosnian War.

International Relations (NOT OFFERED '24-'25)

Spring Semester

This course will explore various ways in which modern states interact with one another. Topics will include, but not be limited to, U.S. foreign policy from the 20th century until today, the United Nations, the European Union, the North Atlantic Treaty Organization and various trade partnerships in which the United States has participated. Course readings will involve the study of international relations theories, institutions, actors and current events.

Psychology: The Human Experience (NOT OFFERED '24-'25)

Spring Semester

Throughout this one-semester course, students will engage with research methods in psychology, discuss theoretical perspectives on human behavior, plan and conduct studies and experiments, and collaborate in an interdisciplinary, supportive, project-based environment. We will explore psychology through an historical lens, studying the development of psychology and understanding of theoretical approaches throughout the course of history. Through this lens, we will analyze ethical bases of research, the earliest theories of psychopathology, cognitive processes of development, functional neuroanatomy, environmental and psychological effects on social behavior. Students will be regularly assessed on their knowledge through skills-based written projects, concept-based quizzes, and formal and informal presentations of learned material.

Mathematics Department

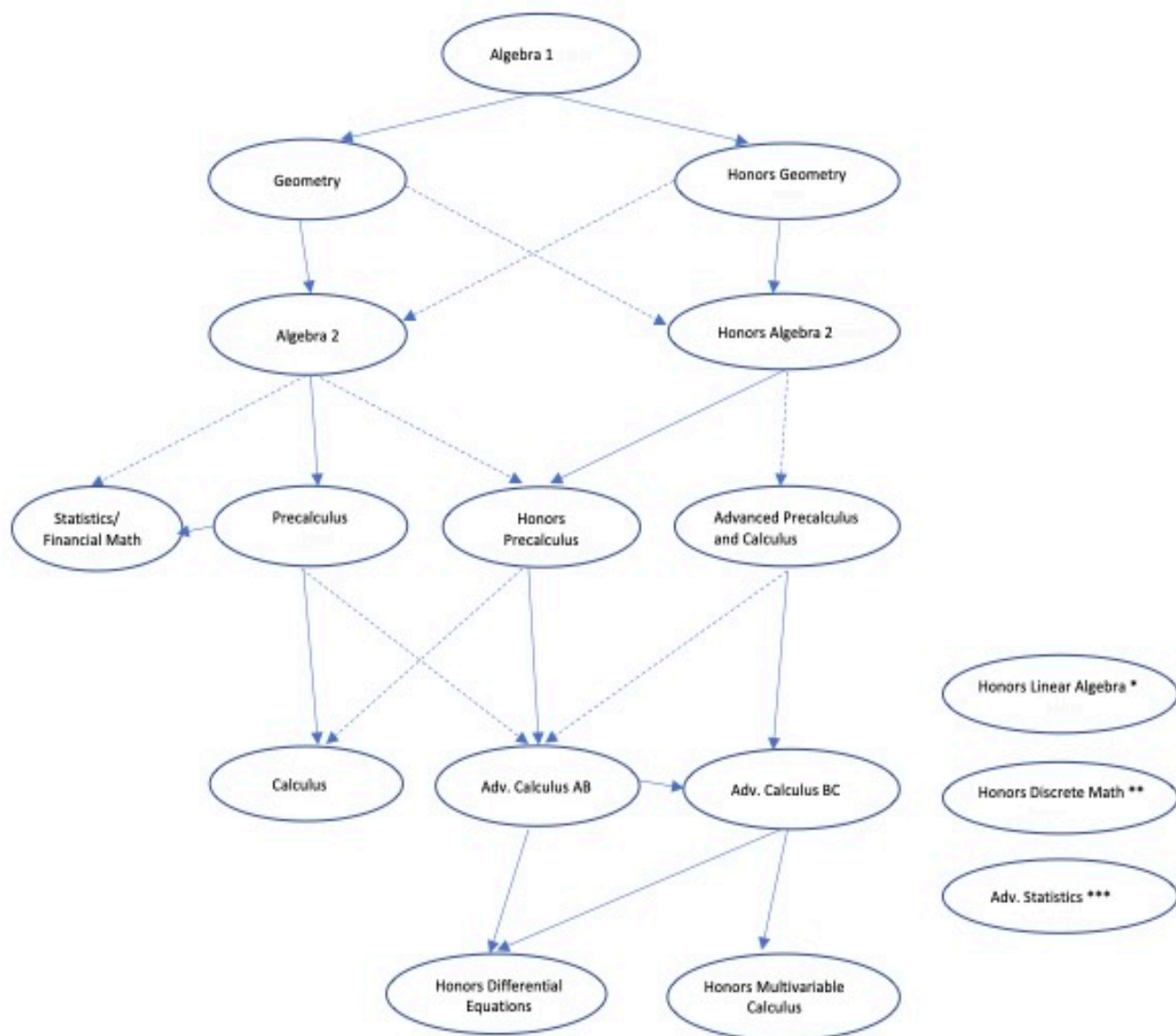
Math is at the foundation of our everyday lives. It is an important tool in understanding and addressing the issues of our day. Math provides the language and the tools used throughout the sciences and humanities. It is crucial to fields such as physics, chemistry, computer science, medicine, economics, business, statistics, architecture, engineering, and environmental science, to name just a few.

The goal of the Fountain Valley School Mathematics department is to develop mathematically literate students; strong analytical thinkers who can apply their critical thinking skills to the complex challenges facing our world. We train our students to use logical reasoning to solve problems and find solutions. Our courses develop better problem-solving, mathematical modeling, data analysis, quantitative and spatial reasoning, and critical thinking.

The development of mathematical skills and the understanding of the mathematical concepts, and how they relate to real-life situations, are key components in our math curriculum. The math program at Fountain Valley School is designed for a variety of student interests and aptitudes. Our courses range from algebra, general statistics, and financial math to college level classes such as BC Calculus and Advanced Statistics, as well as advanced courses such as Linear Algebra and Differential Equations.

The Honors and Advanced courses are available for students who seek the strongest possible preparation in math. These classes consist of students recommended by the department based on their demonstrated ability and interest in mathematics. Students in these classes are expected to maintain a B- or higher average. Students with averages below this may be moved to the non-Honors/Advanced section. A grade of an A and the support of the teacher will be expected for any student who wishes to move from a non-Honors section to an Honors or Advanced section. Any student earning a D may need to complete summer math work to advance to the next level.

In the following chart, the typical flow for a student in mathematics is represented with a solid arrow (the dashed arrows represent the exceptions).



A solid line indicates a typical trajectory, a dotted line indicates a less frequent trajectory.

* Honors Linear Algebra may be taken any time after Honors Precalculus. It requires a teacher recommendation.

** Honors Discrete math may be taken any time after Advanced Precalculus and Calculus, or Calculus AB. It requires a teacher recommendation.

*** Advanced Statistics requires strong English writing skills. It can be taken any time after regular Algebra II. It requires a teacher recommendation.

Algebra I

Yearlong

This course is designed for students who have not yet completed Algebra I before arriving at FVS or have just taken a pre-algebra class. The nature of real numbers is explored through the study of postulates, solving equations and inequalities, system of equations, graphing, exponents, radicals, factoring, probability, statistics, and an extensive study of lines.

Geometry

Yearlong

The visual and practical nature of geometry enables students to develop the tools of logic. These skills will then be used in the more abstract study of analytical geometry and beyond. Students taking this course study points, lines and planes, and they discover relationships between geometric shapes, such as congruence and similarity. Additionally, proofs are used to establish properties of different types of quadrilaterals.

Honors Geometry

Yearlong

Prerequisite: Demonstration of mastery in previous math course and teacher recommendation.

The visual and practical nature of geometry enables students to develop the tools of logic. These skills will then be used in the more abstract study of analytical geometry and beyond. Students taking this course study points, lines and planes, and they discover relationships between geometric shapes, such as congruence and similarity. Additionally, proofs are used to establish properties of different types of quadrilaterals. This honors class will cover additional topics with more depth and at a faster pace than the traditional Geometry class.

Algebra II

Yearlong

Prerequisite: Algebra I.

A solid understanding of algebra is key for success in future math courses. This class will build upon the algebra that students have already learned with the goal of delving deeper into many algebraic concepts. Topics covered include solving equations, transformations of graphs, lines, systems of equations, exponents, factoring, and an extensive study of quadratics.

Honors Algebra II

Yearlong

Prerequisite: Demonstration of mastery in previous math course and teacher recommendation.

Some students may need to take an algebra placement test.

A solid understanding of algebra is key for success in future math courses. This class will build upon the algebra that students have already learned with the goal of delving deeper into many algebraic concepts. Topics covered include solving equations, transformations of graphs, lines, systems of equations, probability, logarithms, exponents, factoring, and an extensive study of quadratics. This Honors class will cover additional topics with more depth and at a faster pace than the traditional Algebra II class.

Statistics

Fall Semester

Prerequisite: Algebra II.

This course presents statistics as a key tool for understanding the world through data. The three major themes of the course are: 1) analyzing data, 2) understanding chance behavior (probability), and 3) drawing conclusions and making predictions from data. The course emphasizes conceptual understanding, clear communication and critical thinking over calculations and algorithms. The statistical concepts and techniques you acquire will prove invaluable in higher-level studies in the natural sciences, social sciences, health sciences and business. It will also serve as a preparation

for college level statistics. Overall, the study of statistics will help you to become a more effective consumer of information.

Financial Math

Spring Semester

Math skills are necessary in many life situations. This course is designed to enhance understanding of basic, practical math applications. Students gain practical math competence through real-world examples that may include areas of budgeting, major purchases, investments, compound interest, taxes, credit cards, salaries and retirement, and finances of everyday living.

Precalculus

Yearlong

Prerequisite: Algebra II.

This class is designed to give students a greater understanding of topics that are important prerequisites for college math classes. Topics covered include transformations, logarithms, statistics, regression curves, sequences, sequences and series, rational functions, trigonometry, and sinusoids. An emphasis will be placed on the use of these skills and their practical applications.

Honors Precalculus

Yearlong

Prerequisite: Demonstration of mastery in previous math course and teacher recommendation.

Numerous topics that the students have been exposed to are covered in more depth to prepare the students for the study of higher-level mathematics. Review topics include the shapes and transformations of graphs, polynomials, and exponential and logarithmic functions. An extensive study of trigonometry with its applications is included as well as an introduction to probability, statistics, matrices, sequences, and series.

Advanced Precalculus and Calculus

Yearlong

Prerequisite: Demonstration of mastery in previous math course and teacher recommendation.

Honors Precalculus is designed for the strong math student and Advanced Precalculus and Calculus is designed for the exceptional math student. Numerous topics that the students have been exposed to are covered in more depth to prepare the students for the study of higher-level mathematics. Review topics include the shapes and transformations of graphs, polynomials, and exponential and logarithmic functions. An extensive study of trigonometry with its applications is included as well as study of limits and the derivative. This class moves at a much faster pace than the Precalculus class. It includes precalculus topics in the fall and calculus in the spring, in order for students to be eligible to enroll in Advanced Calculus BC the following year. Because this course covers two years worth of material in one year, it is very fast paced, and summer work is required.

Calculus

Yearlong

Prerequisite: Demonstration of understanding of precalculus topics.

This class provides an introduction to the three big ideas in first year calculus, limits, derivatives and integrals. The format of the class allows for exposure to these topics with connections to real life applications and without a focus on AP exam preparation.

Advanced Calculus AB

Yearlong

Prerequisite: Demonstration of mastery in previous math course and teacher recommendation. This class explores differential and integral calculus. The theory behind the derivative and the integral, as well as applications of each, is covered in depth. This AP level class is designed so that a student will be prepared to take the AP Calculus AB exam.

Advanced Calculus BC

Yearlong

Prerequisite: Demonstration of mastery in previous math course and teacher recommendation. This class will have a summer assignment and will begin with a very quick review of the calculus topics covered in Honors Precalculus. The new topics that will be covered include more involved techniques of integration, differential equations, infinite series, and calculus for polar and parametric curves. This AP level class is designed so that a student will be prepared to take the AP Calculus BC exam.

Advanced Statistics

Yearlong

Prerequisite: Demonstration of mastery in previous math course, teacher recommendation, and strong English writing skills.

Statistics is the art and science of collecting, organizing, analyzing, and drawing conclusions from data. In Advanced Statistics, the focus will be on four major themes: exploratory data analysis, designing studies, probability models and simulation, and statistical inference. Advanced Statistics is designed to be at least as comprehensive as any one-semester, college introductory statistics course. This advanced level class is designed so that a student who completes additional work outside of class will be prepared to take the AP Statistics exam.

Linear Algebra for Data Science

Fall Semester, Even Years

Math Prerequisite: Honors Algebra II and teacher recommendation.

Coding prerequisite: Highly recommended: Python 2 or familiarity with coding and successful completion of a summer Intro to Python course.

Linear Algebra is a study of systems of linear equations. You'll learn to represent data as vectors and matrices, and identify their properties using concepts of singularity, rank, and linear independence. You'll be able to express matrix operations as linear transformations, perform common vector and matrix algebra operations like dot product, inverse, and determinants, and apply concepts of eigenvalues and eigenvectors to machine learning problems. While primarily a math class, students will also learn to represent and manipulate matrices using the numeric library for Python, Numpy. Having a computer capable of installing Anaconda and running Jupyter Notebooks in the browser is required.

Honors Discrete Mathematics

Spring Semester, Odd Years

Prerequisite: Advanced Precalculus and teacher recommendation.

This class deals with inner product spaces, set theory, number theory, mathematical modeling, and mathematical induction.

Honors Differential Equations (NOT OFFERED in '24-'25)

Fall Semester, Odd Years

Prerequisite: Demonstration of mastery in AB Calculus and teacher recommendation.

Differential Equations is a branch of mathematics that studies how a function is related to its derivative. This class will explore the elementary theory of differential equations along with methods of solution, analysis, and approximations.

Honors Multivariable Calculus (NOT OFFERED in '24-'25)

Spring Semester, Even Years

Prerequisite: Demonstration of mastery in BC Calculus and teacher recommendation.

Multivariable Calculus extends the calculus of a single variable to calculus of several variables. This class will explore three dimensional space, vectors in three dimensions, vector-valued functions, partial derivatives, and multiple integrals.

Computer Science

CS Python 201

Fall Semester

Credit: This course does not satisfy a mathematics or science credit.

This course provides an introduction to coding in Python. Students master basic coding concepts common to all programming languages, such as statements, conditionals, and loops, and are additionally introduced to: libraries, sprite-based graphics, and complex input. Students develop coding-related skills such as decomposition of large programs, debugging, and analyzing code written by others. Students will be able to create games, animations, and other interactive programs in Python upon completion of the course.

CS Python 202

Spring Semester, Odd Years

Prerequisite: CS Python 201.

Credit: This course does not satisfy a mathematics or science credit.

This course continues the in-depth introduction to coding in Python from CS201. Students master basic coding concepts common to all programming languages, such as statements, conditionals, and loops, and are additionally introduced to libraries, sprite-based graphics, and complex input. Students develop coding-related skills such as decomposition of large programs, debugging, and analyzing code written by others. Students will be able to create games, animations, and other interactive programs in Python upon completion of the course. After completing this course, students will be prepared to test for PCEP – Certified Entry-Level Python Programmer certification.

CS 203 Python (NOT OFFERED '24-'25)

Spring Semester

Course Credit: This class can alternatively be taken for a science credit.

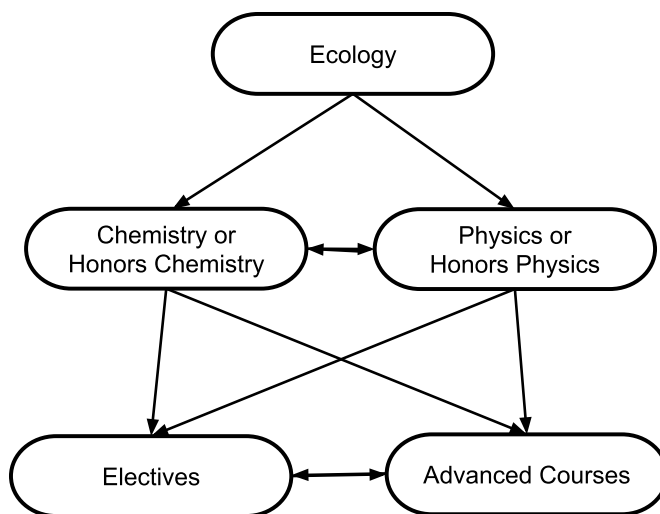
Prerequisite: CS 202 Python.

This course continues the in-depth journey with coding in Python from CS202. During the course, students will master fundamental coding concepts such as file systems, information storage and retrieval, and error handling. Students will also gain proficiency with advanced topics including user-defined modules, data as values, data as references, and graphical user interfaces. In addition, students will learn the product development cycle of user testing, iteration, and automated testing that is ubiquitous in the software industry. Throughout the course, students will continuously demonstrate their knowledge through both traditional assessments and real-world coding projects, growing their professional portfolio. This course will also prepare students to complete Microsoft's Introduction to Programming Using the Python certification exam.

Science Department

Revolutionary advances in science and technology are making their marks on society in a myriad of ways, from genetic engineering to advancements in sustainable energy sources. The science department's goal is to develop scientifically literate students who can understand the basis for and the societal implications of scientific applications. Through a carefully designed network of academically challenging courses, the program strives to strengthen students' understanding of the workings of their own bodies, the intricacies of the physical and biological world, the universe around them, and their place as stewards within it. Our program encourages open-ended problem solving through the development of a mental toolbox of knowledge and skills that enable students to put scientific information to practical use. In this way, students see themselves as an active part of the scientific inquiry process.

Our setting along Colorado's Front Range provides spectacular opportunities for teaching and learning science. Whether it is getting out in our 1,100 acre natural classroom, the breathtaking geology of the area, interacting with the national Space Symposium, visiting local horticultural businesses, or the many biotechnology and premier biomedical research institutes in our vicinity, the science department takes full advantage of the ability to expose our students to cutting edge 21st century science in and outside of the classroom. Through core and elective course offerings, students can explore the diverse ecosystems and geology of Colorado, environmental issues specific to the West and their global implications, principles of robotics and engineering, and how science and medicine converge while developing individual and collaborative problem solving skills. By taking ecology in their 9th grade year, students are exposed to and inspired by a wide breadth of scientific ideas, many seen first hand on our prairie, and thinking that becomes more quantified as they move into chemistry and/or physics in their sophomore year. Forming these scientific foundations in their first two years gives students the opportunity to take advanced level and/or science elective courses in their junior and senior years that allow them to explore their personal interests in a more in depth fashion. Students will graduate from the science program having built a strong scientific foundation and had the opportunity to explore their own interests and curiosities while gaining the confidence and skills to think and apply their scientific knowledge toward society's present and future challenges.



Ecology

Yearlong

Ecology is the study of how living things interact with each other and their environment. This includes living things (biotic factors) and non-living things (abiotic factors). In order to understand the environmental factors influencing ecosystems in the west, ninth grade students will utilize our 1,100 acre campus affectionately known as “the prairie” to conduct long and short-term field experiments. This course will highlight local issues related to Colorado’s unique struggles due to the climate crisis such as water use and scarcity, habitat fragmentation, overpopulation, and soil loss through industrial agriculture. In addition to gaining relevant content knowledge, the goal is to develop the skills essential for success in future FVS science courses as well as those in college. These (skills) include a solid understanding of experimental design, data collection and analysis, graph development and interpretation, and synthesizing content to create viable and testable hypotheses for future research. Students will understand what it means to be a steward of our environment and the importance of doing so in the face of the climate crisis we are experiencing.

Chemistry

Yearlong

Chemistry is the study of matter and energy and the interactions between them. This course covers not only the basic curriculum of chemistry, such as atomic structure, the periodic table, nomenclature, stoichiometry, chemical reactions, and gasses. The course uses lab experiments and project-based activities to connect the concepts learned with real world situations. This course is more qualitative than Honors Chemistry and does not go in as much depth to the mathematical problem solving skills. This course will prepare students for electives in the science department, but not necessarily the Advanced Science courses (see Honors Chemistry).

Honors Chemistry

Yearlong

Prerequisites: Demonstration of mastery in previous science course and teacher recommendation. Some students may need to take an algebra placement test.

Chemistry is the study of matter and energy and the interactions between them. This course covers not only the basic curriculum of chemistry, such as atomic structure, the periodic table, nomenclature, stoichiometry, chemical reactions, and gasses, but also allows for increased depth on each unit, more challenging laboratory exercises, and the application of what we learn. Moreover, this course is specifically designed to properly prepare students for the higher standards and increased content of all Advanced Science courses and is a prerequisite for Advanced Chemistry.

Advanced Chemistry

Yearlong

Prerequisites: Demonstration of mastery in previous Chemistry course, with concurrent enrollment in Algebra II or above, and teacher recommendation.

Advanced Chemistry is a college level chemistry course designed to meet most of the requirements of the Advanced Placement curriculum as defined by the College Board. The course seeks to meet these curriculum requirements within a laboratory framework. Emphasis will be placed on developing experimental techniques and real world applications of chemistry. This college level course focuses on topics such as: thermochemistry, chemical equilibrium, acid-base equilibria, and kinetics. Challenging, regular laboratory exercises, requiring quantitative, rather than merely qualitative analysis, will be emphasized in this course. Students that wish to take the AP exam will need to cover Electrochemistry, Quantum Mechanics, and Bonding Theories independently.

Conceptual Physics

Yearlong

Prerequisite: Successful completion of Algebra 1.

Conceptual Physics introduces students to the fundamental concepts in physics such as forces, ideas of motion, momentum, energy, rotational motion, waves, optics, electricity, and magnetism. (Actual topics covered will depend on student interest and instructor preference.) Students improve their data interpretation and problem solving skills through hands-on activities, labs, and real world applications. This is an Algebra 1 based class and will be more conceptual than the Honors Physics course. This course will use exams, lab reports, problem sets, projects, and field trips to assess student learning. Note: Honors physics can be taken after this course if a student is interested in continuing with physics.

Honors Physics

Yearlong

Prerequisite: Concurrent enrollment in Algebra 2 and teacher approval.

Physics is one of the cornerstones of scientific study and the foundation of engineering disciplines. This laboratory and algebra based course focuses on mechanics with two-dimensional motion and vectors being covered extensively. This course utilizes graphical analysis and mathematical equations along with hands-on labs, projects, and activities with consistent practice in problem solving. Honors Physics is structured to be a foundational class for Advanced Physics. This course is open to sophomores, juniors, and seniors. This course will use exams, lab reports, problem sets, projects, and field trips to assess student learning. Note: This course can serve (but is not required) as a foundation for later exploration of physics in Advanced Physics.

Advanced Physics C: Mechanics

Yearlong

Prerequisite: Demonstration of mastery in previous Chemistry or Physics course, with concurrent enrollment in Advanced Calculus AB or above, and teacher recommendation.

This course provides an intensive investigation of the main principles of mechanics and is representative of an introductory college course typically required for engineering and physical science majors. This course covers: kinematics, Newton's laws of motion, work and energy, momentum, rotation, oscillations, and gravity and orbits. The course utilizes guided inquiry and student-centered learning to foster the development of critical thinking and problem solving skills and uses introductory differential and integral calculus throughout the course.

Advanced Biology

Yearlong

Prerequisites: Demonstration of mastery in previous Biology/Ecology and Chemistry courses, and department recommendation.

This course is a rigorous, college-level survey of major biological concepts including biochemistry, cell structure and function, genetics, evolution, ecology, kingdoms of organisms, and plant and animal physiology. The course is designed to meet many of the requirements of the AP curriculum as defined by the College Board, and goes beyond the standard AP curriculum in many areas, however students that wish to perform successfully on the AP Biology exam may need to cover some topics independently and do some additional work outside of class. Students should expect extensive reading, field and lab work and independent and group projects.

Advanced Environmental Science

Yearlong

Prerequisites: Demonstration of mastery in previous Biology or Ecology and Chemistry courses, and department recommendation.

This course aims to develop citizens who can make informed, knowledgeable decisions concerning environmental issues. By nature, environmental science is interdisciplinary and

includes topics in ecology, population dynamics, atmospheric science, environmental quality, resource allocation, and the economic and ethical impacts of environmental issues. Hands-on activities include field investigations of local ecosystems as well as traditional labs and independent projects. In addition, we will take field trips to explore local resources. This is an advanced level, rigorous class and will cover many of the topics on the AP Environmental Science exam. However, the goal of the course is not to prepare you for the AP test and as such, additional work outside of class would be required in order to perform successfully on the AP Environmental Science exam.

Elective Courses

Anatomy and Physiology

Fall Semester

Prerequisite: Successful completion of Biology or Ecology and Chemistry.

In a world in which rising healthcare costs and increasing disease states are prevalent, understanding the details of one's own physiology is crucial. In order to make students more educated about future personal, political, and medical issues, this course explores the human body systems in depth and gives students an idea of what "normal" physiology looks like. This allows students to better understand how a divergence from this homeostatic norm can lead to disease. The tools this course will utilize include class lectures, textbooks, supplemental scientific research papers, case studies, hands-on laboratory activities, field trips, and interactions with scientists and medical professionals. Laboratory work parallels lecture topics, and includes microscopy, study of human anatomical models, dissection, and physiological experimentation.

Astronomy: Stars and Galaxies*

Spring Semester, odd graduation years

Prerequisite: Algebra II or concurrent enrollment and a level of comfort using math.

This course introduces our current understanding of the universe. Focusing on stars and galaxies, it is designed to be thought provoking: What are stars and how do they form? How did the universe form and how will it end? What are the most distant objects in the universe and how do we know their distances and properties? Topics include electromagnetic radiation, stellar evolution, interstellar medium, galaxies, cosmology, the scientific method, and critical thinking.

**This one-semester course may be taken alone or in addition to Astronomy: Planets and Solar Systems. The courses may be taken in any order.*

Exercise Physiology

Spring Semester

Prerequisite: Successful completion of Biology and Chemistry.

The purpose of this course is to increase the student's knowledge and understanding about human physiology and the adaptations that occur during exercise. Emphasis is placed on bioenergetics as well as circulatory, respiratory and neuromuscular responses to the physical stress of exercise. Also discussed are the effects of environmental factors and ergogenic aids on athletic performance. The tools this course will utilize include class lectures, textbooks, supplemental scientific research papers, case studies, hands-on laboratory activities, field trips, and interactions with exercise science professionals. The objective of this course is for the student to gain an understanding and working knowledge of how the body responds to exercise so that they may apply this knowledge to their personal wellness as well as future studies.

Geology

Fall Semester

Colorado Springs is located in one of the best regions of the world to study geology—the structure of the Earth and its associated processes. We have at our back door approximately two billion

years of geology deposited in the rock record. This field-based course utilizes field trips focusing on the geologic history of Colorado and the Western United States. Students will learn what is literally under their feet as they compile their own extensive rock and mineral collection from field trips and develop a field journal. The class also explores traditional aspects of geology such as plate tectonics theory, rock and mineral identification and glaciation. Since humans have occupied the planet for a scant 4 million of the 4.8 billion years since its creation, studying geology affords a unique combination of learning a science and also gaining perspective on our origins within the physical world.

**This course description and emphasis of the course may evolve based on the scholarship of the faculty member teaching this elective.*

Horticulture

Spring Semester

This course will examine greenhouse, nursery, and garden plants that can thrive on our prairie. We will learn to be 'soil farmers' to care for this precious resource. Soil testing will be conducted to determine the nutrient profile of our growing environment and the goal of the course will be to work with our soil by identifying plants that will thrive in our environment with minimal intervention or support. Landscape design elements, plant hardiness zones, and composting techniques will also be introduced as students will design backyard gardens that would work for their home climate, wherever that may be. This course will be a blend of lab and field work which will reinforce and extend students' understanding of science by associating basic scientific principles and concepts, e.g. pH, with relevant applications in agriculture, e.g. soil chemistry.

Mysteries of the Human Brain

Fall Semester

Prerequisites: Successful completion of Biology or Ecology and Chemistry

Neuroscience has been identified as the 21st century's scientific frontier and Mysteries of the Human Brain is a one semester journey delving into how this amazing network of cells achieves the seemingly infinite tasks it accomplishes to out-function even the most complex supercomputer on the planet. This class will explore the many astonishing feats of the brain's structure and function by gaining an intimate understanding of the workings of individual brain cells, their means of communication, and how they work together to form neuronal networks and circuits that control all the varied functions we perform and establish the workings of our mind and emotions. In order to establish our understanding we will draw on the fields of chemistry, biology, physics, physiology, psychology, and computer science. As our knowledge base is built we will explore the means of neurological diseases and injury, how the brain accomplishes the tasks of learning and memory, the effects of drugs and pharmaceuticals on brain function, and current topics and careers in the neuroscience field.

Sustainable Science

Fall Semester

In a purely human sense, to sustain literally means to keep one's self functioning or enduring at a certain level. In our world today, this word has taken on a wide array of social and environmental implications, with dynamics such as climate change, fossil fuel extraction, and food production practices impacting our world. This class will start from a premise that we all sustain ourselves through a variety of practices, beliefs, and interactions, both with our physical surroundings and with the events of daily life that surround us. In class, we will explore the following dynamics that affect sustainability: the science of cooking and eating, ecosystem awareness and appreciation, making good nutritional choices and understanding where our food is sourced, and mindful consumption (becoming self-reliant by understanding & producing the products that we use daily).

The majority of what we study and learn will stem from making products in a hands-on fashion and understanding the associated scientific processes involved.

Astronomy: Planets and Solar Systems* (NOT OFFERED '24-'25)

Prerequisite: Algebra II or concurrent enrollment and a level of comfort using math.

This course is an introduction to the science of astronomy. The course begins with the historical development of astronomy and our understanding of the night sky, then covers the structure and content of the solar system, and telescopic and space exploration used to study the solar system and extrasolar planets. Emphasis will be on developing a big-picture view of the solar system as a context for understanding the place of our Earth in the cosmos. Observational labs, a field trip to the planetarium at the Air Force Academy, and night sky observations will be included.

**This one-semester course may be taken alone or in addition to Astronomy: Stars and Galaxies. The courses may be taken in any order.*

Biology (NOT OFFERED '24-'25)

Yearlong

Biology is the study of life, which means students will be learning about ecosystems, evolution, human genetics, and human body systems. Students will learn how to apply the scientific method and make personal investigations into the nature of living organisms through various academic and laboratory activities. Emphasis is placed on inquiry based learning to help students engage in science practices and apply what they are learning in the classroom to real life.

Biotechnology and Bioethics: Balancing advancement with morality (NOT OFFERED '24-'25)

Prerequisite: Successful completion of biology AND chemistry and a desire to engage in spirited conversation about topics that often do not get resolved clearly.

This course will explore the current technological advances of genetic engineering while discussing the extent to which their implementation is ethical. Students will learn the science behind and practice the lab techniques involved in editing, cloning, and sequencing genes, investigate the ways in which these advances are being implemented in research and industry, and discuss the ethics involved in all this. The lab portion of this class will be sophisticated and will require a high level of focus and an intense attention to detail. The discussion basis of the course will largely be driven by questions such as: Which genetic alterations are ethical? Which are unethical? Should biotechnology be regulated in our society and/or the research community? Just because we are able to perform certain alterations on plants or animals, should we? Who decides if a certain trait is harmful or helpful?

Nuclear Chemistry (NOT OFFERED '24-'25)

Fall or Spring Semester*

Prerequisites: Successful completion of Chemistry

Nuclear Chemistry is designed to be taken only after the successful completion of a first course in high school chemistry. Topics studied include alpha, beta, gamma radiation, fission, fusion, nuclear reactors, radioactive isotopes including radon, medical uses for radiation, and everyday exposure to radiation and how to limit this. Problem solving is an integral part of the course; students will be expected to work independently and in group laboratory situations.

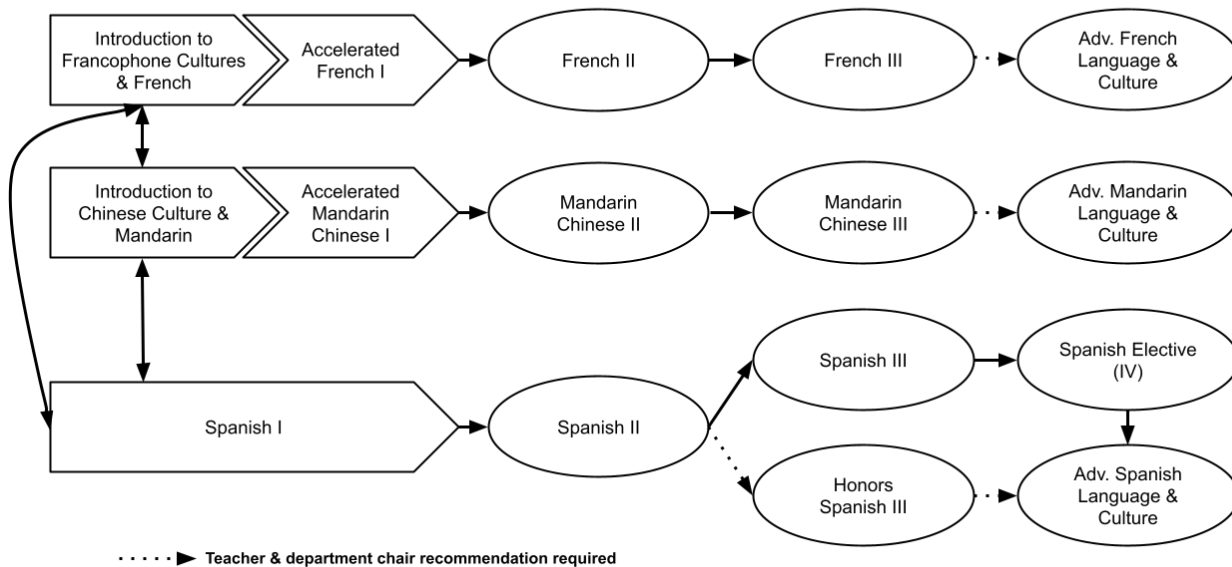
**Students may only take this course once, and should indicate their preference of fall or spring semester.*

Principles of Engineering (NOT OFFERED '24-'25) Fall and spring semesters, even graduation years

This course will discuss engineering in general, the Engineering Design Process, what engineers do in their jobs and the various types of engineering. Student interest in particular types of engineering will guide which sections are covered, but in the past have included Architectural Engineering, Mechanical Engineering, Electrical Engineering, and Robotics. In conjunction with the classwork, students will also design a new product in a semester long Engineering project
**Students may enroll in BOTH semesters, with the second semester focusing on different aspects and principles of engineering design. Fall semester is NOT a prerequisite for the spring semester.*

World Languages Department

The world languages department prepares students to function effectively in another language through classroom immersion. In Spanish, French, and Mandarin Chinese, students develop communicative competence as they acquire appropriate grammar and vocabulary. Taught primarily in the target language, our language courses take a multi-sensory approach to language acquisition and foster mastery of all four language skills (speaking, listening, reading and writing). Through the use of audio-visual and internet-based resources, students are exposed to a variety of authentic linguistic and cultural settings and are prepared to function in real-life situations. We believe that language study increases enjoyment of words and their use, expands awareness of how culture and environment interact, and demonstrates how language reflects culture. Students must complete three consecutive years of one language*. Four full years of language study are strongly recommended.



Introduction to Francophone Cultures and French I

Yearlong

This semester class is meant to pique students' interests in the cultures of the French-speaking world and the fundamentals of French language. This class counts toward a language credit and allows students to continue with their French learning by pairing this course with the Accelerated French I course in the spring. This introductory class exposes students to French language and Francophone cultures with an emphasis on producing meaningful, authentic communication. Students begin developing all four language-learning skills (listening, reading, writing, and speaking) while exploring cultural practices, products, and perspectives. Students will discover differences and similarities between their own language and culture and others in a non-judgmental way.

Accelerated French I

Spring Semester

Prerequisite: Introduction to Francophone Cultures and French.

This course is designed to be paired with Introduction to Francophone Cultures and French and allow students to continue their studies of French. This accelerated course will expand on the fundamental language skills first established in the previous course, as well as prepare students to successfully begin French II. The ability to express simple ideas in the present, past, and future tenses is the benchmark for students' success at the conclusion of this course. Various projects and hands-on activities will allow students to explore French language and culture while building their linguistic skills.

French II

Yearlong

This course strengthens the grammar and vocabulary foundations of French I and continues to enrich the students' knowledge of culture of the French-speaking world. Students expand their abilities to express their own thoughts and concerns on a more complex level. The class begins to move from the primitive paragraph level to more cohesive and organized writing. More complex tenses are also introduced. Various projects and hands-on activities will allow students to explore French language and culture while building their linguistic skills.

French III

Yearlong

In this class, students are challenged by more complex grammatical structures and more detailed vocabulary. Students learn about the French-speaking world through short stories, songs and films. Role plays, interviews and oral presentations about various aspects of French culture enable students to improve their speaking skills, while creative writing assignments, such as fictional stories, poems and postcards help them perfect their language proficiency. All the tenses have been studied by the end of this course. Various projects and hands-on activities will allow students to explore French language and culture while honing their linguistic skills.

Advanced French

Yearlong

Prerequisite: Demonstration of mastery of content from previous course and department recommendation in French III or both French IV semester classes, teacher recommendation, and support of World Languages Department Chair.

This course offers students who have completed Honors French III or two semesters of level-IV electives the opportunity to pursue their study of the French language at the most advanced level available at FVS, with an emphasis on cultural awareness and communication. In this yearlong course, students discuss a variety of concepts through authentic materials from a variety of sources, including newspaper articles, TV and radio newscasts, short films, short stories and literary extracts. Engaging activities are based on a thematic structure aimed at strengthening all

language learning skills while enabling students to express themselves about real-world issues in the target language and learn about the diversity of the French-speaking world. The themes explored in this course include global issues, science and technology, beauty and aesthetics, contemporary life, family and community, as well as personal identity. *This advanced level class is designed to be helpful for students desiring to take the AP French Language and Culture exam, however additional independent study and practice will be necessary for full exam preparation. Students who elect to take the AP French Language and Culture exam will not be required to take a final exam in the course.*

Introduction to Chinese Culture and Mandarin I

Fall Semester

This semester class is meant to pique students' interests in Chinese culture and the fundamentals of Mandarin Chinese. This class counts toward a language credit and allows students to continue with their Mandarin Chinese learning by pairing this course with the Accelerated Man I course in the spring. In this introductory class, students will have the chance to explore the unique and fascinating aspects of both traditional and modern Chinese culture. From traditional instruments and clothing to modern music, songs, and dance, students will learn about a wide range of cultural expressions. Additionally, students will get to taste a variety of Chinese foods, make Chinese handicrafts, and learn basic Mandarin speaking and typing skills. This cultural and linguistic exploration will guide students to discover differences and similarities between their own language and culture and others in a non-judgmental way.

Accelerated Mandarin Chinese I

Spring Semester

Prerequisite: Introduction to Chinese Culture and Mandarin.

This course is designed to be paired with Intro to Chinese Culture and allow students to continue their studies of Mandarin Chinese. This accelerated course will expand on the fundamental language skills first established in the previous course, as well as prepare students to successfully begin Mandarin Chinese II. Students will be expected to actively communicate about familiar topics, focusing on themselves, their families, school and friends, their interests and hobbies in order to develop proficiency in listening, speaking, reading and writing; guest speakers will contribute to students' learning. Various projects and hands-on activities will allow students to explore Chinese language and culture while practicing their language skills.

Mandarin Chinese II

Yearlong

This course continues to develop the students' language skills by providing them with opportunities to produce meaningful, authentic communication while further developing their cultural understanding. To increase proficiency in listening, speaking, reading and writing, students actively communicate about a variety of topics pertaining to the real world. In addition to learning more complex grammar and sentence patterns, topics will include a review of Mandarin Chinese I, how to make phone calls, participate in job interviews, make appointments, understand Chinese customs and transportation and more. After successfully completing this course, students will reach an intermediate level of Chinese listening, speaking, reading and writing, which will allow them to communicate when traveling to China. In this class, students may also learn to make traditional Chinese food and celebrate traditional Chinese holidays. The class will include Chinese culture introduced by guest speakers. Various projects and hands-on activities will allow students to explore Chinese language and culture while practicing their language skills.

Mandarin Chinese III

Yearlong

Chinese III continues to strengthen the students' speaking, writing, listening and reading skills through various authentic texts, media, culture and language contexts. In this course, students learn advanced Chinese sentence structures and grammar. Chinese is used the majority of time in class, including communicating with the teacher and in instructions. Chinese III is designed to improve the students' abilities to communicate effectively and appropriately in real-life contexts. In addition, students develop an understanding of the relationship between the products and perspectives of Chinese society by participating in holidays, festivals and other cultural activities. By comparing them with their own, students recognize distinctive viewpoints about the different Chinese cultures and develop respect for other cultures in the world community. Various projects and hands-on activities will allow students to explore Chinese language and culture while practicing their language skills.

Advanced Mandarin

Yearlong

This advanced Chinese course is intended to develop the students' language skills in three communicative modes (interpersonal, interpretive, and presentational), while deepening their insights into the various aspects of the cultures of China and other Chinese-speaking communities. Throughout the year, students will learn about various aspects of contemporary Chinese society including significant persons, products, and historical themes. Students will also develop an awareness of China's role in global issues, such as energy and the environment, economics, and politics. Much of the coursework (including homework) in this class is project-based. *This advanced level class is designed to be helpful for students desiring to take the AP Chinese Language and Culture exam, however additional independent study and practice will be necessary for full exam preparation. Students who do decide to take the AP Chinese Language and Culture exam will not be required to take a final exam in the course.*

Spanish I

Yearlong

This course introduces students to the basic vocabulary, pronunciation and grammar of Spanish using the four language acquisition skills (listening, reading, writing and speaking). Students begin to explore Hispanic culture through guided readings, songs, games, skits, discussions and paragraph writing. Along the way, this class will give rich insight into Spanish speaking cultures with an emphasis on art, music, and social customs from a variety of countries. No prior knowledge of the Spanish language is needed or expected for this class; however, students will leave the course with a developed vocabulary and confident command of the present and future tenses. Although an entry level course, this class is taught primarily in Spanish.

Spanish II

Yearlong

In this course, students continue to build on the structural foundations acquired in Spanish I, greatly expanding their vocabulary and cultural awareness. Students grow immensely from Spanish I to II by gaining oral competence through active participation in class discussions, skits, and presentations conducted exclusively in Spanish. Spanish II students will become more and more comfortable expressing themselves in multiple tenses with an emphasis on the past and future tenses. Throughout the school year, students will read a short novel and follow a video series to further connect their classroom instruction to authentic material. Depending on the student's performance and motivation at the end of this course, as well as the completion of summer work, it may be recommended by the Spanish II teacher and by the chair of the department that the student continue with Honors Spanish III the following year.

Spanish III

Yearlong

This course emphasizes communicating in Spanish with grammatical and cross-cultural accuracy. Vocabulary and structures center on contemporary issues: personal relations, hobbies, daily life, health and well-being, travel, nature, science and technology, economy and occupations, popular culture and communication, and literature and art. Written and oral mastery through building appropriate vocabulary and linguistic structures is actively pursued by writing and sharing short essays, literary pieces, dialogues and monologues. Additionally, students will discover appropriate music, film, and video clips for auditory mastery and cultural enrichment.

Honors Spanish III

Yearlong

Prerequisite: Grade of A- or higher in Spanish II, teacher recommendation, and support of World Languages Department Chair.

Similar to Spanish III, this course also offers students a deeper understanding of the relationships between the U.S. and the Spanish-speaking world (Hispanic America, Spain). Students work at an accelerated pace in a setting of higher expectations. Students discuss various subjects and express their ideas at an abstract level. Students prepare formal written and oral reports on human rights, biographies of prominent Hispanic figures, and points of interest in the Spanish-speaking world. Each unit includes a short film by a contemporary filmmaker from a Spanish-speaking country as well as the analysis of a literary text. Students read and analyze in depth works by authors such as Cervantes, Borges, Garcia Marquez, Benedetti Quiroga, Neruda, Allende, and Denevi. This course offers multiple opportunities for students to voice their opinions and to engage in serious discussions in Spanish. The workload for this course is rigorous. Students develop and refine both oral and written skills, working on fluency, accuracy, and self-confidence in Spanish. Building on grammatical and vocabulary foundations learned in previous levels, students work especially on the following grammatical points: preterit vs. imperfect, personal pronouns, the subjunctive both in the present and past, the future and conditional tenses, and "if" clauses. This course is conducted entirely in Spanish.

Spanish IV: Culture Through Song

Fall Semester

Prerequisite: Completion of Spanish III.

This course is offered in the fall as a level IV, semester-long elective where students are immersed in the Spanish language and explore cultural themes through song lyrics. Such themes may include education, social injustice, family and identity, as well as contemporary life in the Spanish-speaking world. Music explored will be complemented by articles and short texts, as well as interviews and other types of audio-visual material. Students in this class will be able to considerably increase their knowledge of Spanish vocabulary and review advanced grammatical concepts while strengthening their speaking, listening, reading and writing skills. This is an advanced Spanish course and therefore requires prior completion of Spanish III. Students wishing to take Advanced Spanish Language and Culture the following year must take both a fall elective and a spring elective in Spanish. A placement in Advanced Spanish Language and Culture following two semesters of Spanish electives will also require approval from the teacher and the World Languages Department Chair.

Spanish IV: Culture Through Film

Spring Semester

Prerequisite: Completion of Spanish III.

This course is offered in the spring as a level IV, semester-long elective where students are immersed in the Spanish language and explore cultural themes through film or television series. Such themes may include education, social injustice, family and identity, as well as contemporary

life in the Spanish-speaking world. Each film will be complemented by articles and short texts, as well as interviews and other types of audio-visual material. Students in this class will be able to considerably increase their knowledge of Spanish vocabulary and review advanced grammatical concepts while strengthening their speaking, listening, reading and writing skills. This is an advanced Spanish course and therefore requires prior completion of Spanish III. Students wishing to take Advanced Spanish Language and Culture the following year must take both a fall elective and a spring elective in Spanish. A placement in Advanced Spanish Language and Culture following two semesters of Spanish electives will also require approval from the teacher and the Languages Department Chair.

Advanced Spanish

Yearlong

Prerequisite: Demonstration of mastery of content from previous course and department recommendation in Honors Spanish III or both Spanish IV semester classes, teacher recommendation and support of World Languages Department Chair.

The Advanced Spanish Language and Culture course is a rigorous course taught exclusively in Spanish and approximately equivalent to a 5th or 6th semester university course. The course requires students to improve their proficiency across the three modes of communication (interpretive, interpersonal, and presentational). The course focuses on the integration of authentic resources including online print, audio, and audiovisual resources, as well as traditional print resources that include literature, essays, and magazine and newspaper articles, with the goal of providing a rich, diverse learning experience. Students communicate using advanced vocabulary and linguistic structures as they build proficiency in all modes of communication. The course is divided into thematic units which are further based on recommended contexts and guided by essential questions. Corresponding cultural elements are integrated into the study of the units, and activities are directed with those cultural connections in mind. Discussion of the topics completely in Spanish is a requirement for this course. It is assumed that students have previously been exposed to advanced language structures in the courses leading up to the Advanced Spanish Language and Culture course; however, review of the mechanics is done within the contextual framework of each unit as needed. Students in this course will be prepared to take the AP Spanish Language and Culture exam in May if they choose to do so.

Honors French III (NOT OFFERED '24-'25)

Yearlong

Prerequisite: Grade of A- or higher in French II, teacher recommendation, and support of Languages Department Chair.

Honors French III is designed for students who would like to continue their study of the language at a faster pace and prepare themselves for AP French Language and Culture. The structures and concepts introduced at the French III level are studied in more depth in this Honors class and are analyzed in the context of themes that match those prescribed by the AP French Language and Culture exam, including environmental issues, travel and living spaces in the francophone world. While students are provided with many opportunities to improve their listening comprehension skills with authentic interviews and documentaries, and to practice their oral communication skills in real-life situations, they also read longer and more complex documents than in French III and start learning how to write essays and other structured compositions.

French IV: Culture Through Songs (NOT OFFERED '24-'25)

Fall Semester

Prerequisite: Completion of French III.

This course is offered in the fall as a level-IV, semester-long elective where students are immersed in the French language and explore cultural themes through song lyrics. Such themes may include

education, social injustice, family and identity, as well as Parisian life and challenges of French-speaking Africa. Each song will be complemented by articles and short texts, as well as interviews and other types of audio-visual material. Students in this class will be able to considerably increase their knowledge of French vocabulary and review advanced grammatical concepts while strengthening their speaking, listening, reading and writing skills. This is an advanced French course and therefore requires prior completion of French III. Students wishing to take Advanced French Language and Culture the following year must take both a fall elective and a spring elective in French. A placement in Advanced French Language and Culture following two semesters of French electives will also require approval from the teacher and the Languages Department Chair.

French IV: Culture Through Films (NOT OFFERED '24-'25)

Spring Semester

Prerequisite: Completion of French III.

This course is offered in the spring as a level IV, semester-long elective where students are immersed in the French language and explore cultural themes through film or television series. Such themes may include education, social injustice, family and identity, as well as French regions and contemporary life in Quebec. Each film will be complemented by articles and short texts, as well as interviews and other types of audio-visual material. Students in this class will be able to considerably increase their knowledge of French vocabulary and review advanced grammatical concepts while strengthening their speaking, listening, reading and writing skills. This is an advanced French course and therefore requires prior completion of French III. Students wishing to take Advanced French Language and Culture the following year must take both a fall elective and a spring elective in French. A placement in Advanced French Language and Culture following two semesters of French electives will also require approval from the teacher and the Languages Department Chair.

Advanced Spanish Literature and Culture (NOT OFFERED '24-'25)

Yearlong

Prerequisite: Demonstration of mastery of content from previous course and department recommendation in Advanced Spanish Language and Culture, teacher recommendation, and support of Languages Department Chair.

The Advanced Spanish Literature and Culture course is a rigorous course that is taught exclusively in Spanish and is approximately equivalent to a 7th or 8th semester university course. This course is designed to introduce students to the formal study of a representative body of texts from Peninsular Spanish, Latin American and U.S. Hispanic literature. The goal of this course is to teach students to read, understand, and interpret Spanish literary texts as independently as possible. This course will prepare students to understand lectures in Spanish, to participate actively in discussions in Spanish on literary topics, to do a close reading of literary texts of all genres in Spanish, and to analyze critically the form and content of literary works using appropriate terminology. The course provides opportunities for students to demonstrate their proficiency in Spanish across the three modes of communication: interpersonal, interpretive and presentational. The overarching aims of the course are to provide students with ongoing and varied opportunities to further develop their proficiencies across the full range of language skills and to encourage them to reflect on the many voices and cultures included in a rich and diverse body of literature written in Spanish. Students in this course will be prepared to take the AP Spanish Literature and Culture exam in May if they choose to do so.

Year-Specific Required Courses

Grade 9

FVS Chapter One

Fall Semester

This **9th grade** course serves as a comprehensive orientation to all things FVS. This is a pass/fail course and required for graduation. Students will gain the skills they need to make the most of life at Fountain Valley; cultivate a class culture of belonging and compassion; and work with supportive faculty to ensure success within and outside the classroom. Students will learn how to engage in self-reflection and develop skills for self-advocacy, time management, and coping with stress. Students will also cultivate tools for navigating the many relationships that define life at FVS: relationships with friends, with roommates, with trusted adults, and with themselves. Through this course, students will identify and discuss their personal strengths, challenges, and concerns as they embark on living and learning in our unique community. Finally, students will look outward toward developing empathy for others, celebrating diversity, and making change in their communities - at FVS and beyond. This is a pass/fail class that combines large-group meetings, small-group discussions, structured study halls, and scheduled free time to practice time management skills.

Grade 10

FVS Chapter Two

Spring Semester

In this course, **10th graders** will meet once a week throughout the second semester to address topics on leadership and the value of self-reflection. This pass/fail course will emphasize the importance of goal-setting and aligning one's intentions with an established path forward. Students will also reflect upon effective leadership and what makes a good leader. Students will also further establish effective communication skills, develop ways to model peer-leading, and how to find and establish your purpose in a community. This course is meant to prepare students for the various leadership opportunities they will encounter in their upper-class years.

Grade 11

Junior College Workshop

Spring Semester

In this course, **11th graders** will meet at various times throughout the third and fourth quarter to prepare for the college search and application process. Jr. College Workshop covers a broad range of topics, including: researching and creating the college list, understanding the selective admission process, standardized testing, the college essay, letters of recommendation, and financial aid.

Newly Enrolled 10th, 11th, and 12th Graders

FVS Chapter One: Abridged

Fall Semester

This course for **newly enrolled 10th, 11th, and 12th graders** serves as an abridged orientation to all things academic at FVS. Once a week for the first six weeks of the school year, students will review the skills they need to make the most of their academics at Fountain Valley and will address some of the following topics and skill sets: self-advocacy, time-management, communicating effectively with teachers, understanding expectations, and how to maintain their

course load in order to balance rigor and performance as well as understanding FVS culture and leadership opportunities.

Grade 12

The Capstone Experience

At Fountain Valley School, we know that you want to be a leader in our world who embodies courage, compassion, curiosity, open-mindedness and self-reliance. In order to do that, you need unique learning experiences that take you beyond the classroom, be engaged in the community, and be prepared and connected with the working world. That's why we offer the Capstone, Honors Capstone, and Global Scholar Diploma options to you.

We believe an educational experience should be fulfilling, gratifying and transforming. We understand that in this instant-gratification driven era, it is a challenge to dive deeply into a quest of heart and intellect through inquiry, research, experiment, application and reflection. This is why, based on nearly 200 years of experiment lead by John Dewey and publicized by David Kolb, the Capstone Experience provides a unique experience that integrates coursework, knowledge and skills through the experiential learning model to enable the student to demonstrate a broad mastery of learning across the curriculum for personal growth, further career advancement and real-world application. Here is how we do it.

Capstone

Senior Capstone Project

Spring Semester

You are a perfect fit for this course if you have not applied for Honors Capstone or Global Scholar Diploma projects. During the spring semester, you will work on and complete your project with the guidance of a designated faculty member in scheduled class times. To start the brainstorming process, share initial ideas, and submit project proposals for your Senior Capstone Project, you will meet with the Director of Capstone Experience twice during your 11th grade year and then two to three times during the fall semester of your 12th grade year. Your Capstone project will culminate with a presentation to the community in mid- to late-April of your 12th grade year.

Honors Capstone

Fall and Spring Semesters

Prerequisites: Other than submitting a project proposal before the end of their 11th grade year, there are no prerequisites for this option. This assumes, however, that students are in good academic standing, have not had excessive attendance issues (as this may impact their ability to work independently), and are positive members of our community.

This is a year-long experience that requires students to have a solid working idea of their Capstone project by the end of their 11th grade year. These projects will be too involved or too time consuming to complete successfully in one semester and this option will provide time in the fall semester of the senior year for students to finalize the details and start the actual work on their project. This work will continue through the spring semester culminating in presentations to the FVS community in mid-April of the students' 12th grade year.

Honors Capstone Courses

Honors Capstone Inquiry and Exploration

Fall Semester

Course Credit: .25 credit and graded as pass/fail.

Through a semester-long independent exploration and inquiry, you will co-create a five-minute Capstone Podcast that summarizes your research and analyzes your next step. You will start your investigation with finding out why, what and how to formulate your essential questions of your project. Guided by your essential question, you will begin the deep dive and a head start on your Honors Capstone Project. In your Capstone Podcast, you will be answering the following three questions: Why are you interested in this project? What have you found out so far? What is your next step?

Honors Capstone Project

Spring Semester

Course Credit: .5 credit and graded as high pass/pass/fail.

Once the spring semester kicks off, you will be engaged in rounds of speed dating that probe and clarify your research findings to ensure a profound understanding of your project and a clear direction forward. Soon after, you will present an informal Capstone Talkback about a specific element of your project in the community. This could be in the dorm, in the classroom, in the dining room with audiences who support you and want to hear about your progress. At the end of the semester, you are expected to present your final Capstone Project. You have a wide variety to choose from as your presentation format such as one of the following: podcast, documentary, TedTalk, papers, or visual arts representations.

Global Scholar Diploma (GSD)

Grade 11: Spring Semester Application

Grade 12: Fall and Spring Semester Courses

Prerequisites: If you possess the following qualities, we encourage you to apply for and attain a Global Scholar Diploma: you thrive academically in challenging classes, have the ability to work independently, reliably meet deadlines, effectively communicate, both orally and through your writing, be leaders and role models in the FVS community, and have served this community through your activism and participation in campus culture and life. To be considered as a GSD candidate, please read the [application and interview](#) process and complete the steps indicated.

The pinnacle experience of the FVS Global Education curriculum is the Global Scholar Diploma program. This specific tract will challenge you to develop an international perspective by refining a particular set of knowledge, skills, and attitudes to grasp the nature of global interdependence. Depending on your chosen direction, Global Scholar Diploma projects can focus on the humanities, the sciences, engineering, the arts, and truly anything in between. A GSD final project can include a variety of mediums such as formal research paper, podcast, documentary or hands-on project. The project you create, however, should have a strong foundation in rigorous research and scholarship, generally at the college level.

Global Scholar Diploma Courses

Honors Research Methodologies and Globalization

Fall Semester

Course Credit: .5 history credit and graded as pass/fail.

In the fall semester, time will be dedicated to college-level research and project development, global event attendance, and leadership and service to FVS. You will learn and discuss globalization theory, citizenship, and contemporary applications of your research to the ever-connected world, and will refine your project direction by attending two research sessions at the University of Colorado, Colorado Springs (UCCS), where you will work with university librarians. As the semester progresses, you will create your annotated bibliography and refine your analytical thinking, writing, and verbal processing skills as you work towards specific parameters for your final project. You will create a 5-minute GSD Podcast that summarizes your research and analyzes your next step as well as writing formal reflections about your research and the global events you attend.

Global Scholar Project

Spring Semester

Course Credit: .5 history credit and graded as high pass/pass/fail.

You will build on the research conducted in the Fall, and then finish and defend your projects before a faculty panel and audience in early May. Part of this project will be seeking an expert in your field of study to conduct a formal, recorded interview. During this semester, you will be engaged in rounds of speed dates that probe and clarify your research findings to ensure a profound understanding of your project and a clear direction forward. Soon after, you will present an informal Capstone Talkback about a specific element of your project in the community. This could be in the dorm, in the classroom, in the dining room with audiences who support you and want to hear about your progress. At the conclusion of this course, your project will include the following: an annotated bibliography investigating a global issue (30-source minimum); leading a Unity Day and/or Earth Day workshop; the creation of a GSD portfolio website including reflections, interview transcript, annotated bibliography, and final project; your GSD Project (i.e., 20-page minimum paper, 30-minute minimum formal presentation, 30-minute minimum podcast episode, documentary film, or other project idea per faculty approval); a final presentation and defense of your project before a faculty panel and audience in early May.

Additional Course Offering

Directed Study

Fall and Spring Semester

Qualified students who wish to undertake serious study in an area not covered by the School's curriculum may propose a directed study. In order to be considered for such a study, students must exhaust all standard course offerings in the area of study, and must then complete the directed study form to show the design, documentation and features of their proposed project. Directed studies must be academic in character, must be undertaken under the auspices of an academic department, and must be sponsored and supervised by a faculty member. They will be worth one-quarter credit (.25), last one semester in length, and may not count towards any graduation requirement or one of the student's five classes. These directed studies are pass/fail only.

Strength & Conditioning (NOT OFFERED '24-'25)

Spring Semester

This course introduces theories and principles of strength training and metabolic conditioning to improve fitness, health and overall wellness. Students will acquire knowledge and skills needed to perform safe and effective strength and conditioning sessions. They will explore basic principles of anatomy and physiology, strength training techniques, exercise modifications, training for different populations, development of personal strength training programs, and current fitness trends. Students will understand the importance of fitness principles as they relate to the development of lifetime fitness and well-being. The tools this course will utilize include class lectures, textbooks, supplemental scientific research papers, case studies, hands-on laboratory activities, field trips, and interactions with fitness professionals