

C o l u m b u s A c a d e m y

UPPER SCHOOL 2026-2027



Course Description Guide for Grades 9 - 12

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Upper School Overview

The Upper School fosters a supportive yet intellectually vigorous, college-preparatory environment grounded in meaningful relationships, genuine student voice, and a commitment to preparing young people to lead lives of purpose in college and beyond. Over the course of four years, our students engage with our diverse curriculum, grow as artists and athletes, organize community service activities, serve in leadership roles, contribute to clubs and affinity groups, collaborate with alumni, mentor younger learners, and much more. In addition to a variety of advanced and honors (AP) courses, we partner with Global Online Academy (GOA) and Malone Schools Online Network (MSON) to expand our students' learning opportunities. Through these varied experiences, the Upper School nurtures students' intellectual, academic, and social development with integrity, helping them grow into curious, compassionate individuals ready to make a meaningful impact beyond themselves.

Mission Statement

The Columbus Academy - an independent, coeducational, college preparatory school - enriches its academic tradition of excellence by valuing a broad diversity of students, as it seeks to develop the complete person - mind, body and character. The School rewards rigorous effort and accomplishment; fosters compassion, respect and moral courage; and insists on integrity, fair play, and community service. The Academy strives to develop and sustain a community of thoughtful, responsible, capable and confident citizens eager to engage in a pluralistic and ever-changing world.

Diversity Statement

Columbus Academy believes that diversity, inclusion, equity and justice are essential to the excellence of our community, culture and curriculum. We recognize that the pursuit of this excellence requires thoughtful, deliberate and sustained action and that this effort is critical to our educational mission.

Community: We value diversity in all of its dimensions including but not limited to gender, race, ethnicity, religion, sexual orientation, physical abilities, family composition and socio-economic status. We seek to reflect multiple perspectives, backgrounds and interests in all facets of our community. We recognize that students who are exposed to and embrace diversity are better prepared to engage in a pluralistic world.

Culture and Climate: We strive to be an inclusive community in which each individual feels safe, respected and valued. In building a community that values similarities and differences among its constituents, we seek to embody in our actions and in our relations with one another the principles of equity and justice as well as Columbus Academy's core values of honesty, respect, compassion, responsibility and fairness.

Curriculum: We believe that exposure to multiple – and even sometimes competing – points of view best equips students to explore, understand and apply complex concepts, building the basis for a rigorous education. By weaving diversity into the fabric of our curriculum, we equip our students with the interpersonal and critical thinking skills that are essential to success in the complex, multicultural world in which we live.

Columbus Academy adheres to the National Association of Independent Schools (NAIS) Principles of Good Practice for Equity and Justice.

Non-Discrimination Policy

Columbus Academy encourages and welcomes applications from students without regard to race, creed, sexual orientation, religion or national origin and does not discriminate in the administration of its educational policies, financial aid programs and school-administered extracurricular programs.

GRADUATION REQUIREMENTS

Twenty-one credits are required to graduate, and all students must take a minimum of 5 academic credits in every semester.

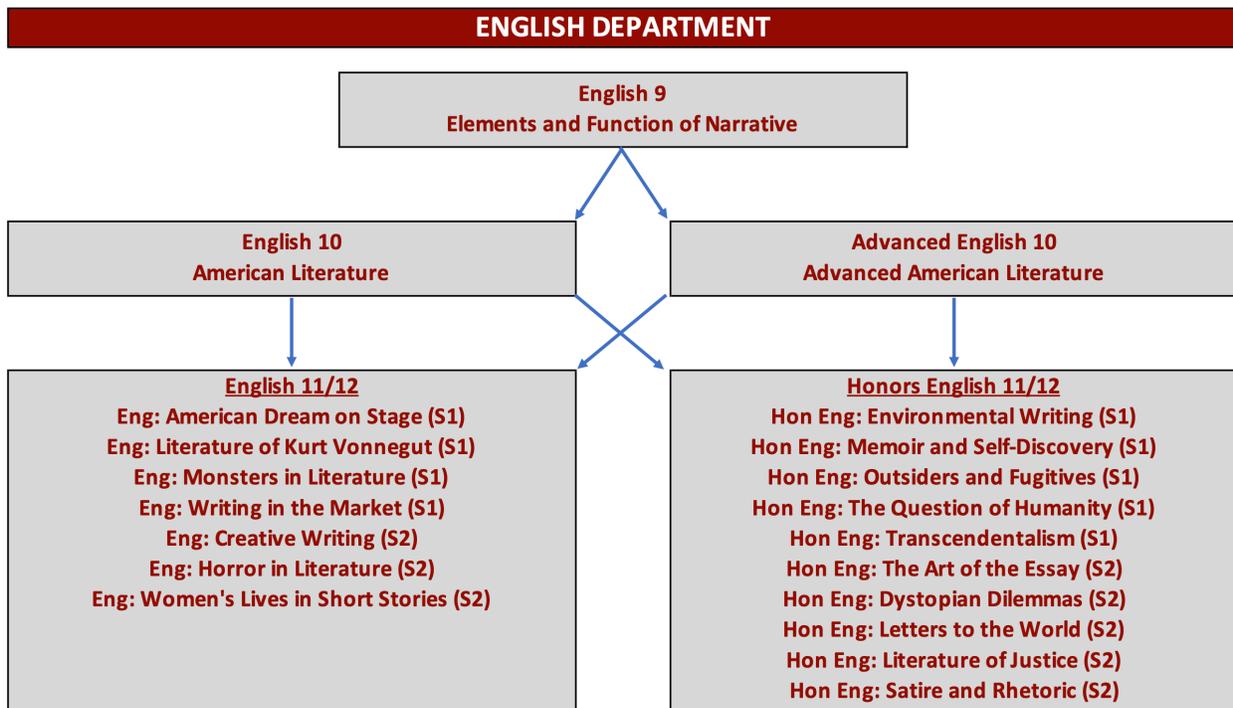
The following credits are part of the graduation total:

- 4 credits of English
- 4 credits of Mathematics (including Algebra 2)
- 3 credits of a single World Language or two credits of two World Languages
- 3 credits of History: Human Geography, Modern World History, and United States History
- 3 credits of Science: Biology, Chemistry and Physics
- 1 credit of Fine Arts or Performing Arts

In addition to the graduation requirements outlined above, students must satisfactorily complete the following in order to receive an Academy diploma: Health, Freshman Research, Ethics and Community, 3 Physical Education credits, Junior Speech, Senior Project, Summer Reading Requirements, and our Community Service Requirement (50 hours). All academic courses taken in the senior year must receive a passing grade.

ENGLISH DEPARTMENT (4 Credits Required)

The upper-school English program upholds the school’s academic tradition of excellence and rewards rigorous effort and accomplishment by providing appropriate academic challenges to the school’s full range of students: we develop a solid base of language skills (reading, thinking, speaking, writing) in English 9 and build on that base in standard, advanced, and honors-level courses in grades 10-12. The texts we read offer opportunities for our students to view the world from a diverse range of perspectives; discussing and thinking critically about those texts allow students to engage many variations of the human condition—the intellectual, ethical, moral, emotional, and economic issues raised by texts produced across a wide range of geography and time; writing about those texts allows students to articulate with precision some of the products of that engagement. Ideally, active and thoughtful engagement with texts (and each other) provide ethical models, can encourage empathy and compassion, and help young people locate themselves in a wider world.



ENGLISH 9: Elements and Function of Narrative (Full Year, 1 Credit)

Ninth-grade students explore stories from around the world by reading and analyzing novels, short stories, poetry, and drama. Students analyze literary elements—setting, plot, character, figurative language, and style—while inferring theme and meaning. Through discussion and writing, students develop critical thinking skills and articulate insightful responses to texts. Writing assignments emphasize literary analysis alongside narrative, comparative, descriptive, and informational forms. Students learn to draw conclusions, gather supporting evidence, and clearly articulate the connections between their claims and proof. These skills are developed through formal essays, informal responses, and timed writing exercises. Vocabulary, grammar, reading, and visual literacy instruction support both literary study and standardized test preparation.

ENGLISH 10: American Literature (Full Year, 1 Credit)

Tenth-grade students will explore American literature as both a product and a shaper of culture. The course traces the nation's literary development from early contact narratives through contemporary works, examining how diverse voices and experiences have contributed to our national conversation. Readings draw from multiple literary traditions and genres: nonfiction, fiction, poetry, and drama. Building on skills from English 9, students write formal essays, informal responses, and timed analyses in response to literature and writing prompts. Students also develop research, organization, and presentation skills through speech writing and delivery.

ADVANCED ENGLISH 10: American Literature (Full Year, 1 Credit)

Like English 10, Advanced English explores American literature as both a product and shaper of culture, tracing the nation's literary development from early contact narratives through contemporary works. However, this course features more challenging texts and emphasizes close reading as a foundation for deeper critical analysis. Students examine how diverse voices and experiences have contributed to our national conversation through readings drawn from multiple literary traditions and genres: nonfiction, fiction, poetry, and drama. The course also connects analytical skills to everyday reading, helping students apply critical thinking beyond the classroom. Building on prior skills, students write formal essays, informal responses, and timed analyses in response to literature and writing prompts. Students also develop research, organization, and presentation skills through speech writing and delivery. While writing objectives are similar across course levels, Advanced students are expected to demonstrate greater mastery and sophistication, particularly in rhetoric. This includes more complex syntax and diction, thorough development of ideas, precise connections between claims and evidence, and strategic organization that effectively advances their arguments.

Prerequisite: A final grade of A- or higher in English 9 and faculty recommendation

English 11/12

In grades 11 and 12, students choose from semester courses at the standard or honors level. These courses focus on single authors or thematic topics, offering a mix of canonical and contemporary subjects. Honors classes prepare students for the AP English Literature exam (even-numbered years) and AP English Language exam (odd-numbered years).

All courses examine both the formal qualities of literary texts and their cultural contexts. Students explore how ethics and morality shape characters and drive narrative questions. A major goal is for students to read significant works of literature with critical insight, enjoyment, and appreciation of form, content, and context. Writing assignments develop essential communication skills for academic and professional life. Students complete informal in-class responses, formal analytical essays, and creative pieces that sharpen their ability to articulate interpretations with clarity and precision.

Honors course prerequisite: Final grade of at least A- in Standard English 10 or Standard English 11/12; or a final grade of B in an Advanced English 10 or Honors English 11/12; and faculty recommendation

ENG: American Dream on Stage (S1) (Semester 1, 1/2 Credit)

This course examines how the American Dream has been presented and critiqued on stage. The class will read plays that explore what the American Dream means to different segments of society and the obstacles they face in achieving it. Students will discuss the unique requirements of theatrical writing and participate in dramatic readings and brief skits based on the plays. Possible texts include *All My Sons* and *Death of a Salesman* (Miller), *A Raisin in the Sun* (Hansberry), and *A Streetcar Named Desire* (Tennessee Williams).

ENG: Literature of Kurt Vonnegut (S1) (Semester 1, 1/2 Credit)

This course explores the work and worldview of Kurt Vonnegut, one of America's most original, humane, and darkly funny literary voices. Through selected essays, letters, speeches, and student-selected major texts—*Slaughterhouse-Five*, *Cat's Cradle*, *The Sirens of Titan*, *Mother Night*, or *Galápagos*—students will examine Vonnegut's dark humor, satire, science fiction elements, and moral philosophy. This course will consider how he confronts war, technology, religion, free will, and what it means to be a decent human being in a chaotic universe. The course also includes the documentary *Kurt Vonnegut: Unstuck in Time*, which provides biographical and historical context for his work. Through discussion, analytical writing, and creative projects, students will analyze narrative structure, recurring motifs, and Vonnegut's distinctive voice while reflecting on why his work continues to resonate with contemporary readers.

ENG: Monsters in Literature (S1) (Semester 1, 1/2 Credit)

Whether they appear as bumps in the night or a creature hiding under the bed, monsters frighten many of us when we're children. Depictions of monsters in literature and other popular media have varied greatly throughout the years, ranging from Tennyson's "The Kraken" to Michael Jackson's "Thriller," from "Jabberwocky" to *The Walking Dead*, and from Tolkien's Gollum to the Demogorgon in *Stranger Things*. This course will explore different facets of monsters and what qualifies one to be considered a monster. Since monsters are often the things that most scare us, real or imagined, a study of a society's monsters is also necessarily a depiction of what that society fears, values, and shuns. Additionally, this course will look at how monsters relate to gender, race, and ableism. Be prepared to embrace the spooky: to face it, to stare at it, and to figure out what makes it tick - and what makes it so scary. Potential texts include *Beowulf* and *Grendel* (Gardner), *The Book Eaters* (Dean), and *A Monster Calls* (Ness).

ENG: Writing in the Market (S1) (Semester 1, 1/2 Credit)

Students will research real-world business problems through a team-based structure. Working in groups of four or five, students will collaborate with local entrepreneurs to tackle the challenges business owners face. Success will depend on each member's ability to work independently while contributing to the team. The course emphasizes creative problem-solving, critical thinking, public speaking, research, and writing. Through business-oriented articles and excerpts from *The Culture Code* (Coyle), students will explore the characteristics of highly successful groups and presentations.

ENG: Creative Writing (S2) (Semester 2, 1/2 Credit)

This course is designed for students to explore, discover, and strengthen their talents in poetry, creative nonfiction, and fiction writing. The class will cover the basic craft elements of creative writing while also reading and analyzing works by accomplished writers. Students will produce their own creative works that they will share with others in workshops designed to give and receive constructive criticism. The whole process is designed to provide an appreciation for the artist and his or her craft and to help students develop the skill and technique that creative writing demands. Students will be required to write and revise numerous pieces of creative writing and critical writing throughout the semester; the primary goal of this practice is for students to seek out their creative voice and interests through a committed exploration of their own words and the words of others. Potential texts include *Creative Writing Four Genres in Brief* (Starkey), *I Was the Jukebox* (Beasley), and *St. Lucy's Home for Girls Raised by Wolves* (Russell).

ENG: Horror in Literature (S2) (Semester 2, 1/2 Credit)

How do writers and filmmakers use fear to explore psychology, culture, and power? The course begins by reading short stories by Edgar Allan Poe, establishing key elements of Gothic atmosphere, unreliable narration, and psychological terror. Students then study Hitchcock's *Psycho*, both as a

landmark of the horror genre and as a film deeply influenced by Poe's themes and techniques. Building on these foundations, the course moves to modern and contemporary works of horror as dark satire, including *Carrie* by Stephen King, student-selected short fiction, and *The Trees* by Percival Everett, which examines how horror addresses social tension, violence, and collective trauma. Students will also analyze contemporary horror films, choosing either *Get Out* or *Sinners*. Through close reading, film analysis, discussion, and analytical writing, students will consider not only how horror frightens us, but what those fears reveal about the world we inhabit.

ENG: Women's Lives in Short Stories (S2) (Semester 2, 1/2 Credit)

This class examines the roots of gender roles in religion, history, and economics, then explores how these roles are woven into the culture and often constrain women's ambitions and dreams. Through short stories and novellas, students will see how women navigate societies and families to create space for self-expression while fulfilling their roles as wives and mothers. This class will be divided into 3 different units: "Resistance," "Independence," and "Legacies." Works from authors Kate Chopin, Alice Walker, Susan Glaspell, Amy Tan, and others will be included. Some texts will be selected through student research and choice.

HON ENG: Environmental Writing (S1) (Semester 1, 1/2 Credit)

In this course, students will consider the environment not just as a scientific subject, but as a place of radical rhetorical power. Students will deconstruct how language is used to shift human consciousness, moving from the urgency of Rachel Carson's *Silent Spring* to the land ethics of Aldo Leopold. The foundational text of the course is Robin Wall Kimmerer's *Braiding Sweetgrass*, analyzing her focus on reciprocity, interdependence, and gratitude. This course will pair these texts with Ross Gay's *Inciting Joy* to explore how celebration and community-building serve as essential forms of environmental resistance. The classroom experience extends across the 231-acre campus. This class will partner with the Explorers classes to consider Rachel Carson's essay on childhood wonder. Students will observe the natural world with scientific precision while mastering sophisticated synthesis and rhetorical analysis skills. Through a mix of outdoor immersion and rigorous textual study, students will leverage the power of the written word to advocate for a more sustainable and just future. This course will help prepare students for the AP English Language and Composition exam in May.

HON ENG: Memoir and Self-Discovery (S1) (Semester 1, 1/2 Credit)

How much of your sense of self relies on your memory of your lived experience? Why do you remember what you remember? Have you been shaped by experiences you'd rather forget? To quote science fiction writer Ted Chiang, "People are made of stories. Our memories are not the impartial accumulation of every second we've lived; they're the narrative that we assembled out of selected moments." In this class, students will study how authors use literary elements and rhetorical strategies to shape their personal experiences into memoirs. The readings will include memoirs, personal narratives, short stories, poetry, and articles. Possible texts include *So Long, See You Tomorrow* (Maxwell), *Crying in H-Mart* (Zauner), *Cuz: The Life and Times of Michael A.* (Allen), as well as excerpts from writing by St. Augustine, Benjamin Franklin, Frederick Douglass, Helen Keller, George Orwell, Helen McDonald, Trevor Noah, and others. This course will help prepare students for the English Language and Composition AP exam in May.

HON ENG: Outsiders and Fugitives (S1) (Semester 1, 1/2 Credit)

What does it mean to belong? To feel visible or invisible? How does one claim, lose, or construct an identity? In this course, students will explore how individuals arrive at a new sense of self-discovery even when all the odds seem against them, in situations that are outlandish and surreal. This course will also consider the appeal of escape and exploration in various characters' desire for self-acceptance and a good life, including those who have been displaced. The readings will include short essays,

articles, and selected pieces from different historical and cultural contexts. Possible texts: selections from *Invisible Man* (Ellison), *This Boy's Life* (Wolff), *Woman Warrior* (Kingston), and *The Giant*, O'Brien (Mantel); "The Metamorphosis" (Kafka); and the film, *A River Runs Through It* (Maclean). This course will help prepare students for the AP English Language and Composition exam in May.

HON ENG: The Question of Humanity (S1) (Semester 1, 1/2 Credit)

What makes us human? What distinguishes us from other animals, or from robots or computers? Whether one subscribes to human exceptionalism or believes that the world suffers from a failure of humanity, the concept of being human and what that implies is more complicated than it initially may seem. This course will explore the question of humanity in some depth, examining proposed answers across times and cultures. While students may not come to a definitive answer, they are likely to end up with a greater appreciation for their shared place in the larger scheme of things. Possible texts: *Frankenstein* (Shelley), *Blindsight* (Watts), and a collection of shorter pieces. This course will help prepare students for the AP English Language and Composition exam in May.

HON ENG: Transcendentalism (S1) (Semester 1, 1/2 Credit)

Do you think and act independently, or are you a conformist? What are you learning from the natural world? How might you be connected to everyone and everything around you? This course will explore these questions as they arise in the literature of Transcendentalism, the philosophical and literary movement that emerged in the early 19th century in the United States. This movement, characterized by its emphasis on individualism, intuition, and the belief in the inherent goodness of both people and nature, has had a lasting impact on American literature and thought. The course will study prominent Transcendentalists through close reading and discussion and by crafting various forms of writing: analytical, personal, and creative. Possible texts include *Walden* (Thoreau), *Civil Disobedience and Other Essays* (Thoreau), *Self-Reliance and Other Essays* (Emerson), "Song of Myself" (Whitman), selections from Margaret Fuller's *Woman in the Nineteenth Century*, and *Into the Wild* (Krakauer). This course will help prepare students for the AP English Language and Composition exam in May.

HON ENG: The Art of the Essay (S2) (Semester 2, 1/2 Credit)

Aldous Huxley said, "The essay is a literary device for saying almost everything about almost anything." In this course, students will delve into the rich and diverse landscape of non-fiction prose, exploring the power of the essay as a form of expression, persuasion, and reflection. Students will analyze classic and contemporary essays, examining content, form, and style. Through a variety of writing assignments, students will also refine their own voices as essayists. Texts may include works by the following authors: Virginia Woolf, Michelle Zauner, George Orwell, E.B. White, Jamaica Kincaid, Nora Ephron, James McConkey, Hanif Abdurraqib, and David Sedaris. This course will help prepare students for the AP English Language and Composition exam in May.

HON ENG: Dystopian Dilemmas (S2) (Semester 2, 1/2 Credit)

Do technological advances optimize our time or monopolize our attention? Does genetic engineering enhance agricultural output and crop resilience or erode biodiversity and empower corporate control? Will artificial intelligence equip us for the future or strip us of our ability to think for ourselves? Fiction can have an uncanny ability to predict the future; a novel written decades ago can anticipate the preoccupations of the present day. In this class, an early study of a prescient, dystopian novel, such as Huxley's *Brave New World* (1932) or Butler's *Parable of the Sower* (1993), will inform and extend the analysis of non-fiction texts that address contemporary dilemmas. Readings may include excerpts from works such as *The Anxious Generation* (Haidt), *The Omnivore's Dilemma* (Pollan), or *Empire of AI* (Hao), in addition to short stories, op-eds, and other articles. This course will help prepare students for the English Language and Composition AP exam in May.

HON ENG: Letters to the World (S2) (Semester 2, 1/2 Credit)

Love letters, secret letters, prison letters, political letters, casual letters, rejection letters. The relationship between the writer and their audience is especially powerful in the letter form. In this course, students will study letters' private and public audiences, as well as the letter-writing occasion. This course will include letters by literary and historical figures, traditional-length letters, and long-form letters as narratives. Possible texts: *Between the World and Me* (Coates), *Dear Ijeawele, or a Feminist Manifesto in Fifteen Suggestions* (Adichie), and a variety of shorter letters. This course will help prepare students for the English Language and Composition AP exam in May.

HON ENG: Literature of Justice (S2) (Semester 2, 1/2 Credit)

In today's political climate, the term social justice has taken on greater weight: some view being called a social justice warrior a point of pride, while others use it as a slur. However, social justice is not a new concern at all—humans across time and cultures seem to share a fundamental sense of fairness and justice. When we are at our best, we call attention to injustice and try to correct it. In this course, students will read a number of important texts that address the stickiest issues of their times—and, ideally, develop their own language with which to address the injustices of their own time and place. Possible texts: *The Rights of Man* (Paine), *A Vindication of the Rights of Woman* (Wollstonecraft), *Civil Disobedience* (Thoreau), *A Narrative of the Life of Frederick Douglass* (Douglass), *The Souls of Black Folk* (Du Bois), *A Room of One's Own* (Woolf), and other more contemporary pieces. This course will help prepare students for the AP English Language and Composition exam in May.

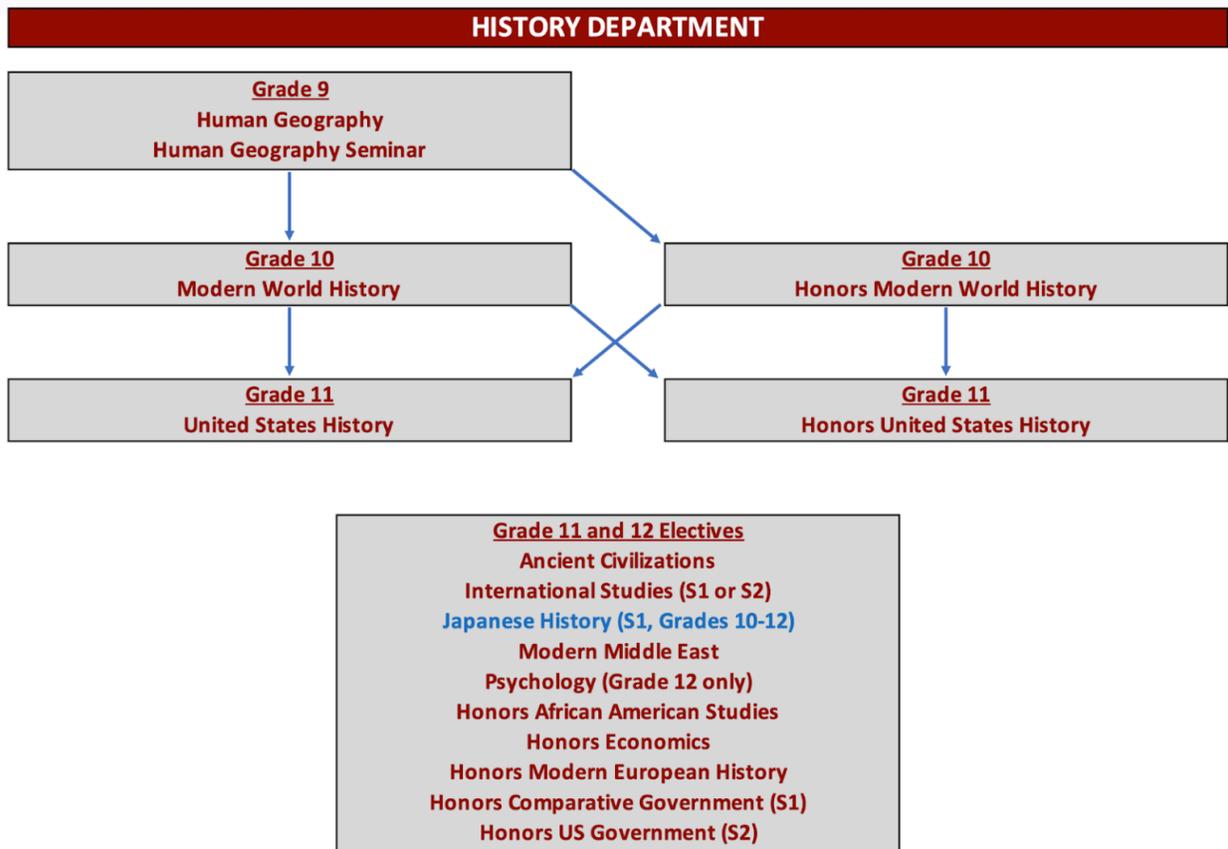
HON ENG: Satire and Rhetoric (S2) (Semester 2, 1/2 Credit)

Why does humor often take us by surprise? Can comedy be persuasive? How might funny stories and wisecracks expose uncomfortable truths about powerful individuals and institutions that might otherwise seem untouchable? Disruptive and uncomfortable, satire can offer a comical and scathing commentary on social, political, and cultural ills, both past and present. The readings will include essays, articles, and selected pieces from different historical and cultural contexts as this course questions whether comedy can effect change. Possible texts: *Me Talk Pretty One Day* (Sedaris), *The Wife of Bath's Tale* (Chaucer), "A Modest Proposal" (Swift), *The Real Inspector Hound* (Stoppard), and *Top Girls* (Churchill). This course will help prepare students for the English Language and Composition AP exam in May.

HISTORY DEPARTMENT

(3 Credits Required - Human Geography, Modern World History, United States History)

The mission of the Upper School History and Social Science Department is to prepare students to be thoughtful and actively-engaged citizens in an increasingly complex and interconnected world. The department’s program is rooted in a foundation of world history, geography and global issues, complemented by an examination of United States history and an array of electives in both history and the social sciences. All of the department’s offerings provide a balance between skill development and content knowledge, and emphasize an active consideration of the rights and responsibilities of citizenship, both national and global, as well as an appreciation for the complexity and diversity of the human experience. In their journey through the progression of History and Social Science courses, students will develop and hone the ability to analyze evidence from a variety of sources, to think analytically and contextually, to understand a multitude of perspectives and historical interpretations, and to communicate effectively, both verbally and in writing. In the process, they will gain a deeper understanding of humans’ interactions with each other and with the environment; of the historical forces that have shaped the modern world; and of the local, national, and global communities in which they live. The goal of the History and Social Science program is to support the Columbus Academy’s broader mission of developing “thoughtful, responsible, capable and confident citizens eager to engage in a pluralistic and ever-changing world.”



HUMAN GEOGRAPHY (Full Year, 1 Credit)

Human Geography provides students with a foundation for further Upper School studies through an exploration of cultural geography and contemporary global issues, along with opportunities to practice and develop skills in research, analysis, reading, and writing. The course will examine the forces that have shaped the modern world through the lenses of several social sciences including geography, history, economics, and sociology. After an introductory examination of both world geography and global issues, units will explore a variety of topics including: governance and human rights, culture and identity, world religions, human interaction with the environment, demographics, migration and urbanization, and globalization and world trade. This course will emphasize global themes, processes, and connections among cultures. Analysis and contextualization of current events and global issues are ongoing, integral elements of this course.

HUMAN GEOGRAPHY SEMINAR (Full Year, 1 Credit)

This parallel course is designed for students who demonstrate intellectual curiosity, analytical depth, and a genuine interest in understanding the complexities of the modern world. The course examines the forces shaping our world through the lenses of geography, history, economics, and sociology, exploring topics such as governance and human rights, culture and identity, world religions, human–environment interaction, demographics, migration and urbanization, and globalization. A central feature of the course is its emphasis on project-based learning. Students engage in substantive, inquiry-driven projects that investigate real-world problems, apply course concepts in authentic contexts, and produce original work demonstrating both content mastery and higher-order thinking. Because much of the work unfolds through extended, multi-step projects, students should be comfortable with open-ended questions, willing to revise and refine their ideas over time, and prepared to collaborate, communicate their thinking, and manage their time effectively. **Enrollment by department approval.**

MODERN WORLD HISTORY (Full Year, 1 Credit)

This course will thematically examine the development of humans and complex societies, from the global convergence of the 15th century CE to the present day. The course will analyze the continuing development of increasingly sophisticated social, economic, and political systems. Interaction with the environment, the impact of technological innovation, and global interconnections are all recurring themes. It will also examine the roots of the major ideologies of the present, including democracy, socialism, capitalism, nationalism, imperialism, and globalism, in an attempt to understand and relate these forces to modern society. The analysis and contextualization of current events and global issues are ongoing, integral elements of this course.

HONORS MODERN WORLD HISTORY (Full Year, 1 Credit)

While the content is similar to Modern World History, this course is a more rigorous approach that combines a thematic examination of modern global history with preparation for the Advanced Placement World History: Modern Examination in May. After a brief survey of early world history, students will analyze the continuing development of increasingly sophisticated social, economic, and political systems from the 13th century CE to the present day. Interaction with the environment, the impact of technological innovation, and global interconnections are all recurring themes. The course will examine intellectual and cultural development from multiple perspectives, and will explore the roots of the major ideologies of the present, including democracy, capitalism, socialism, nationalism, imperialism, and globalism, in an attempt to understand and relate these forces to modern society. The analysis and contextualization of historiography, and of current events and global issues, are ongoing, integral elements of this course.

Prerequisite: A final grade of A- in Human Geography and faculty recommendation

UNITED STATES HISTORY (Full Year, 1 Credit)

This course is taught within a chronological framework, with special emphasis on themes such as American identity, the growth of democracy, civil rights and liberties, economic development, the environment, the impact of technology, cultural diversity, the individual and society, the influence of religion, and the U.S. role in world affairs. The course requires students to explore and evaluate divergent viewpoints, and examine various historical perspectives, including the arts, literature, and cultural artifacts of the time. The development of critical thinking and writing skills is emphasized, and the successful completion of a capstone research paper is a course requirement.

HONORS UNITED STATES HISTORY (Full Year, 1 Credit)

The objectives of this rigorous course are to learn the history of the United States and to develop the skills to “think like a historian.” Critical and comparative thinking, self-awareness, and respect for opposing viewpoints are essential skills in understanding, maintaining, and supporting democracy. Students will develop a broad understanding of the United States’ social, political, economic, and cultural development; as well as its role in global history. Students will also build the skills of historical thinking and writing, including understanding historical causation, patterns of continuity and change over time, and periodization; using comparison and contextualization; crafting a cogent historical argument using relevant historical evidence; and interpreting sources. To achieve these objectives, students will rely on extensive use of both primary and secondary sources. This course will prepare students for the Advanced Placement Examination in United States History.

Prerequisite: A final grade of A- in Modern World History or a B in Honors Modern World History and faculty recommendation

ANCIENT CIVILIZATIONS (Full Year Elective, 1 Credit)

This class is an introduction to the history and culture of the ancient civilizations of Mesopotamia, Egypt, Persia, Greece, Rome, China, and India. It provides a background of the chronological development of these civilizations and then traces their political, economic, and social development up through the beginnings of the postclassical period (500 CE). Together we will examine some of the major themes of early world history, including the interaction between humans and the environment, state formation, cultural diffusion and cultural conflict, the role of religion, and the evolution of social and economic structures over a period of 3000 years.

JAPANESE HISTORY (S1) (Semester 1 Elective, 1/2 Credit)

This one semester course provides a cursory overview of ancient Japanese history, then progresses to the feudal period, the Meiji era, Japan's role during the World Wars, and finally the modern era. Within the Feudal Period, this course examines the evolution of the samurai from the late twelfth to the seventeenth century, with the thematic focus on the evolving dynamics between violence and competing political regimes (monasteries, estate holders, opportunistic households, regencies, cloistered government). Topics within modern Japan will include the intellectual crisis of the late Tokugawa period, the Meiji Constitution, the development of an interior democracy, the rise of Japanese fascism, the Pacific War, and postwar developments. Japanese culture and language will also be explored to gain a better insight into Japan. The course will include lectures, key primary and secondary sources, scholarly analyses, films, and seminar-style discussions.

INTERNATIONAL STUDIES 1 (Semester 1 Elective, 1/2 Credit)

This first semester course will examine the modern histories of Latin America and Southern Africa. Students will explore the diverse cultural footprints of each region and seek to understand current issues in both local and global contexts, and in doing so develop their cultural literacy. In a multidisciplinary way we will examine a variety of aspects of culture, including: history, language, literature, art and music, religion, identity, geography, political and economic systems, and cultural

assimilation (or lack thereof). Students will draw primarily from text materials and their own research and will work frequently in groups to critically examine the many facets of these regions, their development, and their relations with others. This course is a complement to International Studies 2: although it is not required to take both courses, they approach different regions of the world similarly and thus will provide a more complete understanding of four different regions if taken in sequence.

INTERNATIONAL STUDIES 2 (Semester 2 Elective, 1/2 Credit)

This second semester course will examine the modern histories of South Asia and East Asia. Students will explore the diverse cultural footprints of each region and seek to understand current issues in both local and global contexts, and in doing so develop their cultural literacy. In a multidisciplinary way, we will examine a variety of aspects of culture, including: history, language, literature, art and music, religion, identity, geography, political and economic systems, and cultural assimilation (or lack thereof). Students will draw primarily from text materials and their own research and will work frequently in groups to critically examine the many facets of these regions, their development, and their relations with others. This course is a complement to International Studies 1: although it is not required to take both courses, they approach different regions of the world similarly and thus will provide a more complete understanding of four different regions if taken in sequence.

MODERN MIDDLE EAST (Semester 2 Elective, 1/2 Credit)

The goal of this seminar-style course is to provide students with new channels of information to study the diverse aspects of the modern Middle East, resulting in a more nuanced understanding of a world region that is often defined in very severe and finite ways. Students will be asked to explore the cultures, politics, and recent histories of the Middle East through a variety of media, including written sources, film, and music. We will discuss some or all of the following topics: the creation of the modern Middle East (and why it is called “the Middle East”); the role of Islam inside and outside of the region; U.S. foreign policy toward the Middle East; understanding the Palestine/Israel conflict through music; the non-Arab Middle East; and the interplay between resources, religion, and politics. Additional topics will be discussed based on the interests and input of the students.

PSYCHOLOGY (Full Year Elective, 1 Credit)

Psychology is a senior-only survey course which involves the study of behavior and mental processes. Most of the course will be spent learning about normal human behaviors and the techniques that psychologists use to research these behaviors. Topics discussed include research methods, the biology of behavior, sensation and perception, stress and adjustment, learning, memory, cognition, motivation and emotion, life-span development of behavior, personality, and gender and sexuality.

HONORS AFRICAN AMERICAN STUDIES (Full Year Elective, 1 Credit)

This survey course focuses on the historical, political and social contributions of the African Diaspora. Students begin this journey in precolonial Africa before moving through the era of enslavement and resistance, then pushing as far forward as contemporary political and social movements around the globe. While working through understanding the multiple histories of the African Diaspora, students will use the foundations of history, sociology, philosophy, and literary and data analysis to explore the various dimensions of African American Studies. Much of the work done in class will center around the reading of primary sources and historical texts that often conflict. Discussion and participation are necessary aspects of this course and students will be expected to engage with the texts, their classmates and instructor during each class. This course will prepare students for the Advanced Placement exam in African American Studies.

Prerequisite: A final grade of A- in Modern World History or a B in Honors Modern World History, or an A- in United States History or a B in Honors United States History, and faculty recommendation.

HONORS COMPARATIVE GOVERNMENT (S1) (Semester 1 Elective, 1/2 Credit)

This one-semester honors course in Comparative Government and Politics introduces students to the fundamental concepts used by political scientists to study the processes and outcomes of politics in a variety of global settings. It aims to illustrate the rich diversity of political life, to show available institutional alternatives, to explain differences in processes and policy outcomes, and to communicate to students the importance of global political, social, and economic changes. In addition to covering the major concepts that are used to organize and interpret what we know about political phenomena and relationships, students will apply these concepts through in-depth studies of specific countries and their governments (Great Britain, China, Russia, Iran, Nigeria, and Mexico). This course prepares students for the Advanced Placement Examination in Comparative Government.

Prerequisite: A final grade of A- in Modern World History or a B in Honors Modern World History, or a B- in United States History or in Honors United States History, and faculty recommendation

HONORS ECONOMICS (Full Year Elective, 1 Credit)

Honors Economics gives students a thorough understanding of the principles of economic systems. The course places particular emphasis on the study of national income and price determination, and develops the students' familiarity with economic performance measures, economic growth, and international economics. Textbook readings, primary source readings, simulations, group projects, and individual problem-solving activities are used to build understanding. In addition, short papers on current topics and a presentation on a selected topic are required. The course will prepare students for the Advanced Placement Examination in Macroeconomics.

Prerequisite: A final grade of A- in Modern World History or a B in Honors Modern World History, or a B- in United States History or in Honors United States History, or faculty recommendation

HONORS MODERN EUROPEAN HISTORY (Full Year Elective, 1 Credit)

Honors Modern European History is a chronologically organized study of Western civilization from approximately 1300 CE to the present. It offers a comprehensive examination of the foundations of the Western world, including religious beliefs, intellectual movements, and political and economic ideologies such as liberalism, democracy, industrialism, capitalism, socialism, and imperialism. Students will examine the themes of political, social, and cultural change in European history through multiple perspectives, and will also consider issues of historiography through the analysis of primary and secondary sources. This course helps students prepare to take the Advanced Placement Examination in May.

Prerequisite: A final grade of A- in Modern World History or a B in Honors Modern World History, or a B- in United States History or in Honors United States History, and faculty recommendation

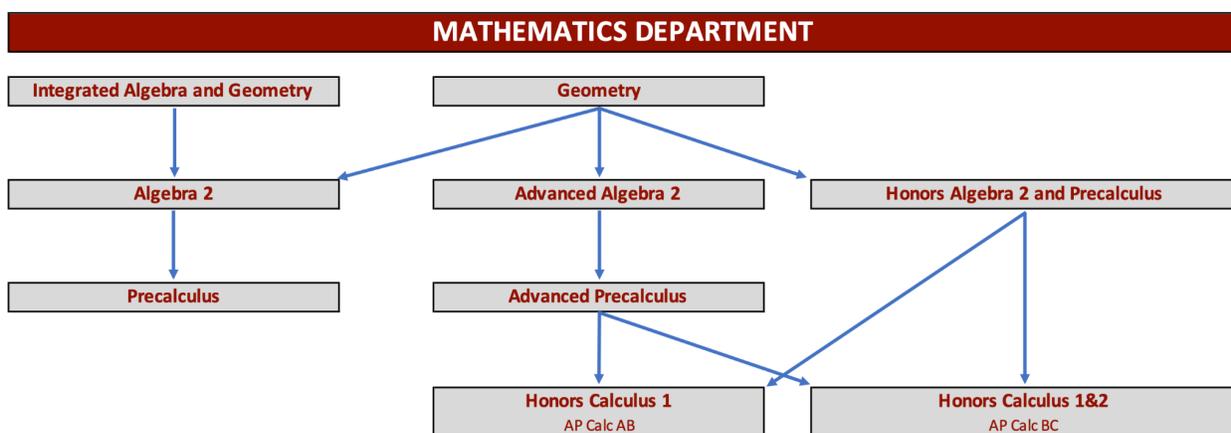
HONORS US GOVERNMENT AND POLITICS (S2) (Semester 2 Elective, 1/2 Credit)

This course is designed to survey the United States federal government and political systems. Students will learn to interpret and analyze the Constitution, important political documents, and data to better understand the American national government and the political actors who interact with it. Course themes include constitutionalism, liberty and order, civic participation in a representative democracy, competing policy making interests, and methods of political analysis. Students will be prepared to take the Advanced Placement U.S. Government Examination in May.

Prerequisite: A final grade of A- in Modern World History or a B in Honors Modern World History, or a B- in United States History or Honors United States History, and faculty recommendation

MATHEMATICS DEPARTMENT (4 Credits Required - Including Algebra 2)

At Columbus Academy, the Upper School mathematics program balances foundational rigor with deep conceptual exploration. While moving through the core sequence of Geometry, Algebra 2 and Precalculus, students are placed in Standard, Advanced or Honors pathways to best suit their mathematical journey. Beyond the core requirements, students may pursue advanced electives including Calculus, Statistics, Multivariable Calculus and Linear Algebra. The department aims to instill a growth mindset in every student. By connecting to Columbus Academy’s *Math Vision*, classrooms foster problem-solving and reasoning skills through logic, visualization and modeling. Students are encouraged to tackle complex, non-routine challenges, developing the confidence to treat mistakes as valuable steps toward mastery.



Grade 11 and 12 Electives and Prerequisites						
Course	Advanced Statistics	Advanced Calculus	Honors Calc-Based Probability & Stats	Honors Calculus 2	Honors Multivariable Calculus	Honors Linear Algebra
Prerequisite	Precalculus	Precalculus	Honors Calc 1 (co-req)	Honors Calc 1	Honors Calc 2	Honors Calc 2 or Honors Calc 1 (senior only)
AP Exam			Statistics	Calc BC		

INTEGRATED ALGEBRA AND GEOMETRY (Full Year, 1 Credit)

Integrated Algebra and Geometry is the second year of the Integrated Algebra sequence. In this course, students will learn the content of Algebra 1 and Geometry in order to set them up for success in Algebra 2. Topics covered in Integrated Algebra B include the study of functions (quadratics, polynomials, and exponential) and analytic Geometry (distance formulas, the Pythagorean Theorem, the Midpoint formula, the equation of a circle, perimeter, area, volume, and triangle trigonometry).

Prerequisite: Pre-Algebra

GEOMETRY (Full Year, 1 Credit)

In Geometry, students will explore the concepts of Euclidean geometry, congruency, and similarity within the context of triangles, quadrilaterals, polygons, and 3-D figures, surface area and volume, basic trigonometry, coordinate geometry. The curriculum is designed to incorporate deductive reasoning, algebraic manipulation, and technology as students develop a greater understanding of proofs, logic, observation, measurement and description. Geometry provides the foundational concepts and thought processes required for Pre-Calculus, Calculus, and standardized tests.

Throughout this course, there is an emphasis on problem solving, proof, communication, and effective use of technology.

Prerequisite: Algebra 1

ALGEBRA 2 (Full Year, 1 Credit)

In standard-level Algebra 2, students will review the concepts introduced in Algebra 1 and deepen their understanding of algebraic operations, simplifying expressions, solving equations, and graphing functions while exploring linear functions and systems, quadratic functions, radical functions, rational expressions and equations, exponential functions, logarithmic functions, conic sections, and basic statistics. Throughout this course, there is an emphasis on processes, communication of mathematics, and effective use of technology. Upon successful completion of this course, students have learned the core concepts required for the SAT exam and are prepared to take Precalculus.

Prerequisite: Algebra 1 and Geometry

ADVANCED ALGEBRA 2 (Full Year, 1 Credit)

In Advanced Algebra 2, students also review the concepts introduced in Algebra 1 and deepen their understanding of algebraic operations, simplifying expressions, solving equations, and graphing functions while exploring linear functions and systems, quadratic functions, radical functions, rational expressions and equations, exponential functions, logarithmic functions, conic sections, and basic statistics. Upon successful completion of this course, students have learned the core concepts required for the SAT exam and are prepared to take Advanced Precalculus. Throughout this course, there is an emphasis on problem solving, communication of mathematics, and effective use of technology. This advanced course is designed for students who enjoy mathematics, seek a greater level of challenge, and accept the responsibility that accompanies an advanced mathematics course.

Prerequisite: Geometry AND permission of the department

HONORS ALGEBRA 2 & PRECALCULUS (Full Year, 1 Credit)

Honors Algebra 2 and Precalculus combines the topics of two math courses in one school year. Students will deepen their understanding of algebraic operations, simplifying expressions, solving equations, and graphing functions while exploring linear functions and systems, quadratic functions, radical functions, exponential functions, logarithmic functions, and conic sections. In the Precalculus section of the course, students will study polynomial functions, rational functions, right triangle and unit circle trigonometry, trigonometric functions and their graphs, inverse trigonometric functions, trigonometric identities, trigonometric applications, sequences and series, probability, vectors, matrices, and an introduction to limits. Honors Algebra 2 and Precalculus is designed for students with a very strong aptitude in mathematics and a willingness to accept the responsibility that accompanies a rigorous mathematics course at an accelerated pace. This course prepares students for Honors Calculus 1 & 2.

Prerequisite: Geometry AND permission of the department

PRECALCULUS (Full Year, 1 Credit)

In Precalculus, students will build upon the concepts learned in Algebra 2 and use mathematical modeling as foundation to develop a deeper understanding of polynomial functions, rational functions, exponential functions, logarithmic functions, logistic functions, logistic functions, vectors, and matrices. After reviewing the concepts of trigonometry introduced in Geometry, students will learn about trigonometric functions and their graphs, inverse trigonometric functions, trigonometric identities, and their applications. Throughout this course, there is an emphasis on problem solving, real-world applications, and effective use of technology. Upon successful completion of this course, students are prepared to take Calculus.

Prerequisite: Algebra 2

ADVANCED PRECALCULUS (Full Year, 1 Credit)

In Advanced Precalculus, students will build upon the concepts learned in Advanced Algebra 2 to develop a deeper understanding of various types of functions. Topics studied include polynomial functions, rational functions, exponential functions, logarithmic functions, matrices, unit circle trigonometry, trigonometric functions, inverse trigonometric functions, trigonometric identities, and equations, laws of sines and cosines, polar coordinates, parametric functions, vectors, sequences and series, binomial theorem, induction, combinatorics and probability, and an introduction to Calculus. Advanced Precalculus is designed for students who have a very strong command of Algebra 2 concepts, plan to take AP Calculus in the future, and accept the responsibility that accompanies a rigorous mathematics course. This course prepares students for Honors Calculus.

Prerequisite: Advanced Algebra 2 AND permission of the department

ADVANCED STATISTICS (Full Year Elective, 1 Credit)

This non-calculus-based statistics course introduces students to the major concepts and tools used to collect, analyze, and draw conclusions from real-world data. Students will explore themes in exploring data, sampling and experimentation, probability and simulation, and statistical inference, with the option to take the Advanced Placement exam. Students will use technology, investigations, problem solving, and writing as they build conceptual understanding. Students who are on track to take Honors Calculus 1 should NOT take this course. Instead, they should take the Honors Calculus-Based Probability and Statistics (HCPSTATS) course.

Prerequisite: Precalculus or Advanced Precalculus AND permission of the department OR Algebra 2 and permission by the department to take as a senior.

ADVANCED CALCULUS (Full Year Elective, 1 Credit)

This course covers the content of a first semester college Calculus course. Students who have completed Precalculus or Advanced Precalculus will learn about limits, differentiation, antidifferentiation, definite and indefinite integrals, and applications of Calculus using exponential and logarithmic functions.

Prerequisite: Precalculus or Advanced Precalculus and permission of the department

HONORS CALCULUS 1 (Full Year, 1 Credit)

This is an honors course, providing mastery of Calculus topics commensurate with a first semester college Calculus course. In preparation for the AP Calculus AB exam, students will learn about the limits and continuity of functions, derivatives and their applications, integrals and their applications, advanced integration techniques, differential equations, and volumes of solids of revolution. Students will be expected to take the AP Calculus AB exam. This honors-level course is designed for students who enjoy mathematics, have a strong command of Precalculus concepts, seek a greater level of challenge and accept the responsibility that accompanies a rigorous mathematics course. Throughout this course, there is an emphasis on problem solving, real-world applications, and effective use of technology.

Prerequisite: Advanced Precalculus or Honors Algebra 2 and Precalculus

HONORS CALCULUS 1 AND 2 (Full Year, 1 Credit)

This is an honors course, providing mastery of Calculus topics commensurate with the first and second semester of a college Calculus course. In preparation for the AP Calculus BC exam, students will learn about limits and continuity of functions, derivatives and their applications, integrals and their applications, advanced integration techniques, differential equations, volumes of solids of revolution, infinite sequences and series, Taylor Polynomial approximations and Taylor series, and parametric, polar, and vector functions. Students will be expected to take the AP Calculus BC exam. This honors-level course is designed for students who enjoy mathematics, have a very strong command of

Precalculus concepts, seek a greater level of challenge and accept the responsibility that accompanies a rigorous mathematics course. Throughout this course, there is an emphasis on problem solving, real-world applications, and effective use of technology.

Prerequisite: Advanced Precalculus or Honors Algebra 2 & Precalculus

HONORS CALCULUS 2 (Full Year Elective, 1 Credit)

This is an honors course, providing mastery of Calculus topics commensurate with the second semester of a college Calculus course. In preparation for the AP Calculus BC exam, students will review the concepts taught in HCALC1 and learn about advanced integration techniques, infinite sequences and series, Taylor Polynomial approximations and Taylor series, and parametric, polar, and vector functions. Students will be expected to take the AP Calculus BC exam. This honors-level course is designed for students who enjoy mathematics, have a strong command of HCALC1 concepts, seek a greater level of challenge and accept the responsibility that accompanies a rigorous mathematics course. Throughout this course, there is an emphasis on problem solving, real-world applications, and effective use of technology.

Prerequisite: Honors Calculus 1

HONORS CALCULUS-BASED PROBABILITY AND STATISTICS

(Full Year Elective, 1 Credit)

This rigorous course develops the mathematical underpinnings of probability and mathematical statistics. The focus of the first semester is probability. Topics studies will include axiomatic probability, discrete and continuous univariate and bivariate distribution functions and their properties, special and commonly used distributions, and large-sample approximation. In the second semester students develop and apply inferential statistical methods, including interval estimation and hypotheses testing for one and two means or proportions, tests for independence in categorical data, analysis of variance with multiple comparisons, and simple and multiple regression models. Students will learn to formulate research questions, design appropriate surveys or experiments, and analyze resulting data. Substantial focus is on providing a rigorous development of principles that link these inferential methods. At the end of this extensive course, all students are required to take the Advanced Placement Statistics exam.

Prerequisite: Honors Calculus 1 or Honors Calculus 1 & 2 or concurrently enrolled in Honors Calculus 1, Honors Calculus 1 & 2 or Honors Calculus 2 AND permission of the department

HONORS MULTIVARIABLE CALCULUS (Full Year Elective, 1 Credit)

Honors Multivariable Calculus generalizes the major ideas from Calculus (rates of change, differentiation, optimization, integration, etc.) to functions of more than one variable, providing a study of paths and surfaces in space. These generalizations are applied to study mathematical objects in three or more dimensions. This course introduces vector analysis, partial derivatives, multiple integrals, and some matrix algebra. Additional course objectives include a better understanding of series and introductory topics in linear algebra. Mathematical software is used to enhance visualization and understanding of course concepts.

Prerequisite: Honors Calculus 1 and 2 or Honors Calculus 2 AND permission of the department

HONORS LINEAR ALGEBRA (Full Year Elective, 1 Credit)

In Honors Linear Algebra, students explore the foundational concepts and methods that underpin much of higher mathematics and its applications in science, engineering, and economics. Students will develop an understanding of vector spaces, matrices, linear transformations, and systems of linear equations. The course emphasizes both theoretical framework and practical applications of linear algebra. Topics include the following:

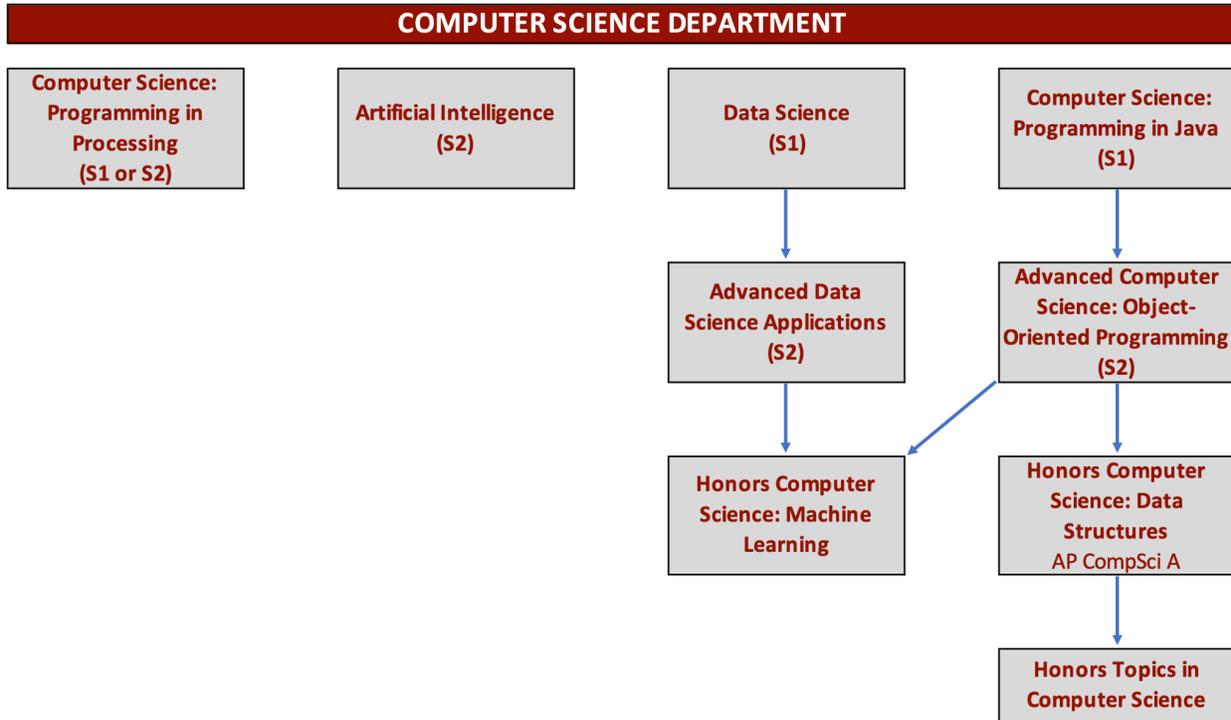
- Vectors and vector operations in two and three dimensions
- Matrix operations, determinants and inverses
- Solving systems of linear equations using Gaussian elimination
- Vector spaces, subspaces, basis and dimension
- Eigenvalues, eigenvectors and diagonalization
- Orthogonality, projections and least squares solutions

Through lectures, problem-solving and real-world applications, students will enhance their analytical skills and gain tools to tackle problems across diverse disciplines. Honors Linear Algebra is designed to build a solid mathematical foundation, preparing students for further studies in mathematics, engineering, computer science and related fields.

Prerequisite: Honors Calculus 1 and 2 or Honors Calculus 2 AND permission of the department

COMPUTER SCIENCE DEPARTMENT

The Computer Science Department provides a dynamic, project-centric curriculum designed to transition students from digital consumers to innovative creators and critical thinkers. Whether a student is interested in the intersection of technology and the arts, the analytical power of data, or the foundational logic of software engineering, the department emphasizes engaging lab-based learning and the ethical implications of modern technology. By focusing on real-world applications, the program ensures students develop the computational thinking and technical proficiency necessary to lead in a complex, data-driven world.



COMPUTER SCIENCE: Programming in Processing (Semester 1 or 2 Elective, 1/2 Credit)

This course offers an introduction to computer science through the lens of creative coding. Programming in Processing emphasizes self-expression, digital art, and interactive design. Students will learn how to use P5.js, a JavaScript library specifically designed for artists and designers, to create visual and interactive programs. The course structure is centered around engaging projects that allow students to immediately apply concepts and explore their personal artistic interests. Each unit culminates in a personalized project, encouraging students to develop a portfolio of creative work. Potential projects include:

- Creating art pieces that generate based on randomness
- Creating interactive digital sketches
- Creating simple animations and games

ARTIFICIAL INTELLIGENCE (Semester 2 Elective, 1/2 credit)

This course introduces the mechanics, logic, and limitations of digital systems shaping our world. Utilizing the aiEDU curriculum, students will explore the history of computing, the mathematics of Machine Learning, and the architecture of Neural Networks. Students will investigate questions, such as: How does ChatGPT really generate text? Why do algorithms discriminate? How will automation

reshape the global economy? Through hands-on projects and labs, students develop AI literacy skills to audit AI systems for potential bias and evaluate AI-generated apps for human users. Potential projects include:

- Making AI-generated art
- Writing an app that judges a book by its cover
- Creating an app that determines the genre of music that is played

DATA SCIENCE (Semester 1 Elective, 1/2 Credit)

This course introduces core concepts and practices of data science, with a strong emphasis on data analysis and visualization using Python. This course explores the data science cycle and highlights ethical considerations, such as data privacy and security. Many real-world connections are made including visits from guest speakers in industry such as business, healthcare, and transportation. Students will learn Python fundamentals including expressions and syntax, table manipulation, data types and arrays, visualization using Matplotlib, and functions. Each unit culminates in understanding Python to perform increasingly complex analyses of data sets. Students will use a variety of real-world data sets and have numerous opportunities to select and analyze their own data sets of interest. Potential projects include:

- Analyzing data from an animal rescue to make a recommendation to increase adoptions
- Constructing a model to rank the best rollercoasters
- Creating an infographic to visualize trends of a sports team

COMPUTER SCIENCE: Programming in Java (Semester 1 Elective, 1/2 credit)

This course introduces foundational structures of the Java programming language to solve increasing complex problems. Java is assessed on the AP Computer Science A exam (taken in Honors Data Structures). Students learn the basic mechanics of writing and executing code, focusing on logic and debugging. Data types, Methods, conditional statements, loops, variables, and parameters are emphasized. Each unit culminates in challenges where students apply programming concepts to solve problems and puzzles. Students will spend significant time tracing code execution and debugging errors to build a robust understanding of how programs work. Potential projects include:

- Writing methods to create fractals
- Writing commands to solve the Tower of Hanoi puzzle
- Creating a digital clock that can display any time

ADVANCED DATA SCIENCE APPLICATIONS (Semester 2 Elective, 1/2 credit)

This course builds directly on the programming and visualization fundamentals established in Foundations of Data Science, moving into statistical methods and algorithms. Students develop analytical skills and apply models to solve complex real-world problems. Topics include loops and simulation, hypothesis testing, optimization, linear regression, decision trees, and classification/prediction models. Students have multiple opportunities to apply their understanding to their own data sets and research questions. Potential projects include:

- Creating a simulation of a game that involves randomness to visualize the results
- Creating a model to determine how likely it is that a phone call from an unknown number is spam
- Creating a regression model to predict the price of bitcoin from the stock market

Prerequisite: Data Science

ADVANCED COMPUTER SCIENCE: Object-Oriented Programming (Semester 2 Elective, 1/2 credit)

This course explores the object-oriented programming (OOP) paradigm in Java. Designed for students who have successfully completed the Foundations of Java course, Advanced Object-Oriented Programming in Java focuses on managing collections of data efficiently and deeply understanding object behavior. This course prepares students to continue the study of Data Structures in Java next year where they will take the AP Computer Science A exam. The course begins by learning what object-oriented programming is by writing classes using constructors and methods. Students gain proficiency in managing various objects, including strings, 1D and 2D arrays, ArrayLists, and handling files. Potential projects include:

- Using randomness to simulate a strategic game
- Using Strings to create a functional text-based game like Wordle
- Using 2-D arrays to create a particle simulator with different interacting particles

Prerequisite: Programming in Java

HONORS COMPUTER SCIENCE: Machine Learning (Full-Year Elective, 1 credit)

This course is for students that have successfully completed one full year of computer science courses. Machine learning uses different algorithms to look for patterns and make predictions from large data inputs. The theoretical and practical applications of Machine Learning are explored, equipping students with tools to implement advanced models. This course emphasizes conceptual understanding of Machine Learning algorithms, as well as their practical applications to diverse datasets. Students will also explore ethical considerations and societal impacts of Machine Learning, such as bias. Topics include supervised and unsupervised learning algorithms and an introduction to neural networks. Throughout the year, the course will address when machine learning is appropriate, and will explore limitations to these approaches. Potential projects include:

- Building a supervised learning model to predict loan defaults, ensuring that certain demographic groups are not unfairly discriminated against
- Using unsupervised learning to build a model to group consumers based on purchasing behavior
- Creating a neural network to classify the mood of Google reviews for a products

Prerequisite: (2025-2026) Data Science or Advanced Computer Science 1

HONORS COMPUTER SCIENCE: Data Structures (Full Year Elective, 1 Credit)

Formerly known as Honors Computer Science 2, this course is modeled after a collegiate-level data structures course. The data structures covered include linked lists, stacks, queues, binary search trees, hash tables, sets, and maps. In addition, more complex searching and sorting algorithms and recursive techniques are covered. Students will take the AP Computer Science A exam.

Prerequisite: (2025-2026) Advanced Computer Science 1

HONORS TOPICS IN COMPUTER SCIENCE (Full-Year Elective, 1 Credit)

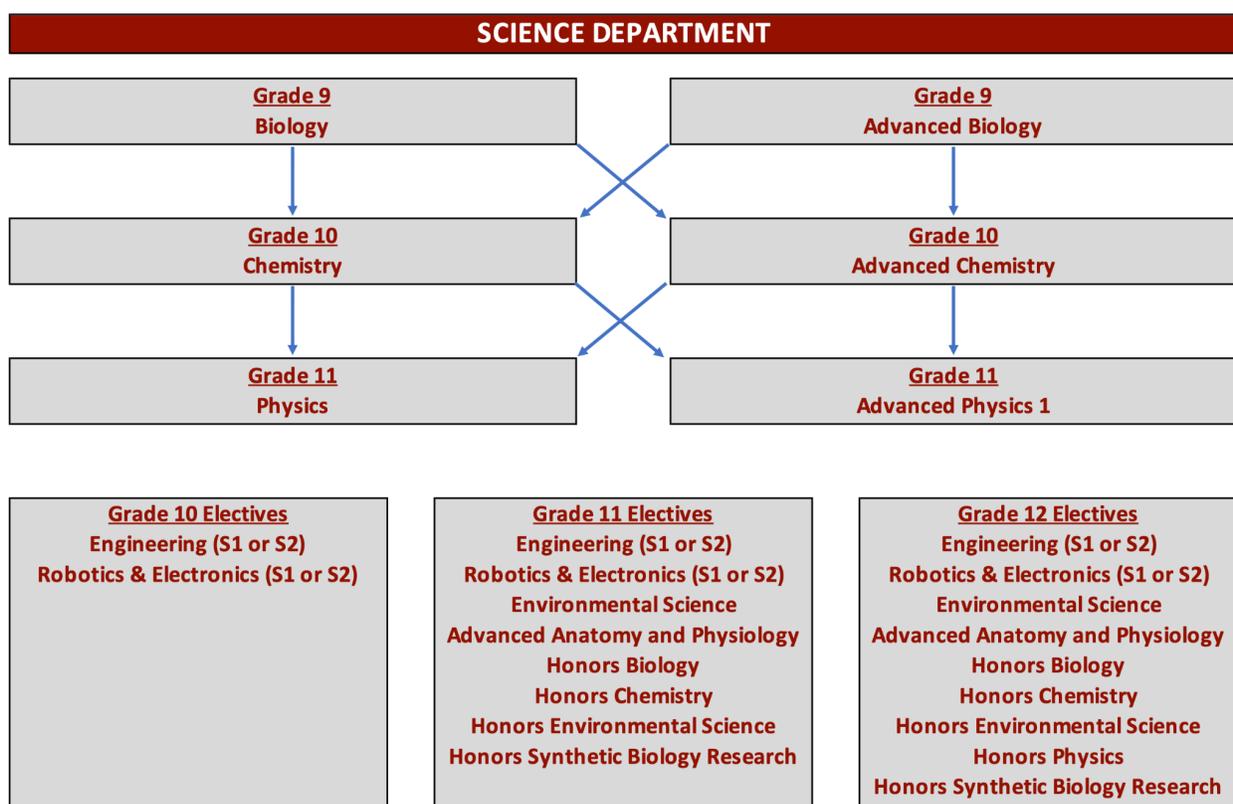
Formerly known as Honors Computer Science 3, this honors-level course will introduce students to a variety of topics selected from a typical undergraduate computer science curriculum. The goal of the course is to develop a deeper understanding of computer science as more than just programming. Topics addressed include: how information is measured, how computers work, how programming languages are developed, what the limits of computation are, how the internet works, and how computers can behave intelligently. Students will complete projects that relate to these topics.

Prerequisite: 2025-2026: Honors Computer Science 2

SCIENCE DEPARTMENT

(3 Credits Required - Biology, Chemistry and Physics)

The goal of the science program in the Upper School is to promote and enhance scientific knowledge and problem-solving skills. Students take core courses in biology, chemistry, and physics, with a selection of three Advanced Placement courses offered as second-year options. In addition, we offer several elective courses in the fields of anatomy and physiology, astronomy, environmental science, and robotics. Each course provides students with an opportunity to heighten their scientific literacy by imparting a clear understanding of the scientific method through skills of observation, experimentation, data interpretation and analysis, critical thinking, and communication. Students learn to work cooperatively in teams, use technology effectively, and value life-long learning, while increasing their awareness of societal issues and career opportunities



BIOLOGY (Full Year, 1 Credit)

Science, ecology, evolution, cell biology, and biochemistry are presented in the first semester, while systematic diversity of life, genetics, molecular biology and an overview of DNA, genetics, and human biology are studied second semester. This course emphasizes real world applications of these concepts. Laboratory and classroom activities stress a hands-on approach to science. There is ample room in the Biology curriculum to spend extra time on a given topic or to explore special topics in order to meet the needs and desires of each group of students.

Prerequisite: Algebra 1 concurrent

ADVANCED BIOLOGY (Full Year, 1 Credit)

Science, ecology, evolution, animal behavior, and biochemistry are presented in the first semester, while cell biology, molecular biology, an overview of DNA and the cell cycle, genetics, the systematic diversity of life, and human biology are studied second semester. A large part of class time is spent on laboratory activities for which students will be expected to complete lab reports using standard scientific format. There is time in the year to explore inquiry-based learning. In addition, students will be expected to think on both a concrete as well as a conceptual level.

Prerequisite: Recommendation from 8th grade science teacher and Algebra 1

CHEMISTRY (Full Year, 1 Credit)

Chemistry is designed to help students gain understanding into the composition and properties of matter as well as how matter reacts. In addition to studying the structure of the atom, topics include chemical bonding, stoichiometry, periodicity, study of the physical states, solutions and acid-base chemistry. Practical application of chemistry is stressed through problem solving, and laboratory investigation is an integral part of the course.

Prerequisite: Algebra 1

ADVANCED CHEMISTRY (Full Year, 1 Credit)

Advanced Chemistry is a traditional chemistry course that emphasizes depth of understanding and challenging problem solving. Topics include the structure of the atom, chemical bonding, stoichiometry, periodicity, physical states, solutions, acid-base chemistry, kinetics, and equilibrium chemistry. Practical application of chemistry is stressed through problem solving, and laboratory investigation is an integral part of the course. Problem sets and laboratory investigations are presented at a challenging level.

Prerequisite: Advanced Algebra 2 concurrent and recommendation of biology teacher

PHYSICS (Full Year, 1 Credit)

Students enrolled in this course will spend a full year exploring classical physics topics such as mechanics, electromagnetism, and wave phenomena. Considerable emphasis is placed on conceptual understanding of these topics, but students are also expected to become proficient in quantitative problem solving. Laboratory work is especially designed to deepen understanding and provide a true hands-on experience of the phenomena under discussion. Advances in technology that strengthen the course are continually being integrated into the program, both in the traditional classroom setting and in the laboratory. Physics is a fast-paced, rigorous course that covers a wide range of topics.

Prerequisite: Algebra 2

ADVANCED PHYSICS 1 (Full Year, 1 Credit)

Advanced Physics is a course designed to offer a greater challenge than standard-level Physics for students who are strong in science and mathematics. This course explores the relationship between matter and energy and how they interact, with a strong emphasis on algebra-based mathematics of Physics. Topics include motion, forces, energy, waves, sound, light, and electromagnetism. Practical application of Physics is stressed through problem solving. Laboratory investigation is an integral part of this advanced course.

Prerequisite: Advanced Algebra 2 AND recommendation of chemistry teacher

ADVANCED ANATOMY AND PHYSIOLOGY (Full Year Elective, 1 Credit)

Anatomy and Physiology is the study of the structure and function of the human body. This course is designed to provide an opportunity to investigate the various organ systems that comprise the human body, their structures, functions and commonly associated pathologies. Through direct instruction, dissections, case studies and project-based learning, students will develop skills such as problem

solving, critical thinking and be able to participate in classroom discussion regarding our course of study and various common pathologies associated with the human body. Annual field trips include a visit to the cadaver labs at OSU and participation in a suturing lab at OUCOM in Dublin, Ohio.

Prerequisite: Biology and Chemistry

ENGINEERING: APPLICATION & DESIGN (Semester 1 or 2 Elective, 1/2 Credit)

This foundational course introduces students to the world of engineering and the principles of design and problem-solving. Particular emphasis will be placed on the engineering design process, STEM and entrepreneurial thinking. Students will explore key concepts such as the engineering design processes, material properties, mechanics, product design and electronics. Through project-based assignments, students will engage in designing and building prototypes using a wide range of tools and technology, and use of several computer utilities essential to engineering, including Sheets, Fusion 360, Easel and Lightburn. Most projects will utilize hands-on construction with application of 3D printing and machining techniques. A combination of individual and group work will encourage teamwork and communication skills while students develop critical thinking abilities essential to engineering. By the end of the course, students will have a comprehensive understanding of how engineers solve real-world problems, preparing them for more advanced engineering topics in the future.

Prerequisite: This Elective is available to Juniors and Seniors

ENVIRONMENTAL SCIENCE (Full Year Elective, 1 Credit)

Environmental Science is a hands-on interdisciplinary course for juniors and seniors. Principles of biology, chemistry, and physics are employed to understand natural earth systems and environmental issues. Geology, oceanography, climatology, and basic astronomy apply to the physical sciences, while ecology and species diversity relate biology to “Health of the Planet” issues. Some topics are also discussed from a social perspective, including environmental regulation, resource allocation, agricultural methods and population. This class includes a substantial amount of time out of the classroom doing actual field investigations.

Prerequisite: Biology and Chemistry

ROBOTICS & ELECTRONICS (Semester 1 or 2 Elective, 1/2 Credit)

This course introduces students to robotics as an applied engineering discipline using real-world hardware: Arduino microcontrollers, RoboClaw motor controllers, and Tetrax mechanical components. Students will learn how mechanical systems, electronics, and software work together to create functional robots. The curriculum emphasizes hands-on engineering, systems thinking, and iterative design. By the end of the course, students will be able to explain how motors, sensors, and servos function in robotic systems and how to program the Arduino microcontroller to control actuators and read sensors. Using the Tetrax structural materials, the students will design and build robots to perform various challenges. This class is project-based. Throughout the semester, students will complete individual projects. The semester exam for the class is a group-based challenge.

Prerequisite: One semester of any CA Computer Science course

HONORS BIOLOGY (Full Year Elective, 1 Credit)

Honors Biology is intended to be the equivalent of a two-semester college-level introductory biology course. Students will continue to develop their understanding of biology through an exploration of topics including evolution, cellular energetics, hereditary information storage and transfer, and biological systems interactions. There will be an emphasis on inquiry-based investigation that will provide students with an opportunity to apply content, science and statistical practices. Honors Biology students are required to take the Advanced Placement Examination.

Prerequisite: Biology, Chemistry

HONORS CHEMISTRY (Full Year Elective, 1 Credit)

This course is designed to be the equivalent of the general chemistry course taken during the first year of college. Students in this course will build on the foundation provided during their first year of high school chemistry. The primary objective is for each student to maximize his/her understanding of fundamentals and develop competence in dealing with chemical problems. This course will help students to think clearly and to express their ideas with logic and clarity. Students are required to take the Advanced Placement Examination.

Prerequisite: Biology and Chemistry

HONORS ENVIRONMENTAL SCIENCE (Full Year Elective, 1 Credit)

This course is designed as an Advanced Placement course in the environmental sciences. Students will develop their understanding of the interrelationships of the natural world through a variety of inquiry-lab investigations and field work. Concepts including energy transfer, interactions between earth systems, interactions between different species and the environment, and sustainability will be primary focuses for the course. Students will spend significant time honing their skills in explanation of environmental concepts, analysis of data (both visual representations and writings), as well as application of quantitative methods in solving problems in preparation for the Advanced Placement Exam. Students are required to take the Advanced Placement Examination.

Prerequisite: Biology, Chemistry

HONORS PHYSICS (Full Year Elective, 1 Credit)

Honors Physics is a second-year Physics course for seniors, although selected students may choose to take Honors Physics as a first-year Physics course as a junior. This course explores the relationship between matter and energy and how they interact. Honors Physics covers advanced topics including mechanics, electricity, and magnetism. This course places a strong emphasis on problem-solving, utilizing algebra, differential calculus, and integral calculus. Honors Physics includes a laboratory component, whereby students will conduct labs to strengthen their critical thinking skills and understanding of the topics. Upon completion of Honors Physics, students will be required to take both the Advanced Placement Physics: Mechanics and Advanced Placement Physics: Electricity & Magnetism exams.

Prerequisite: Honors Calculus or Honors Calculus 1 and 2 AND Physics AND permission of the department

HONORS SYNTHETIC BIOLOGY RESEARCH (Full Year, 1 credit)

Synthetic Biology is a research-focused science elective course. This course is intended to provide students with an authentic scientific research experience, emphasizing the formulation of meaningful research questions rooted in students' everyday lived experiences. Beyond learning various theories and methods in the realm of biotechnology, students will design and conduct experiments, generate original data, communicate their findings within our school community, and present to external scientific communities. This course will deepen scientific literacy, strengthen critical thinking skills, and prepare students for collegiate-level research and inquiry.

Prerequisite: One year of Biology, Advanced Chemistry AND permission of the department

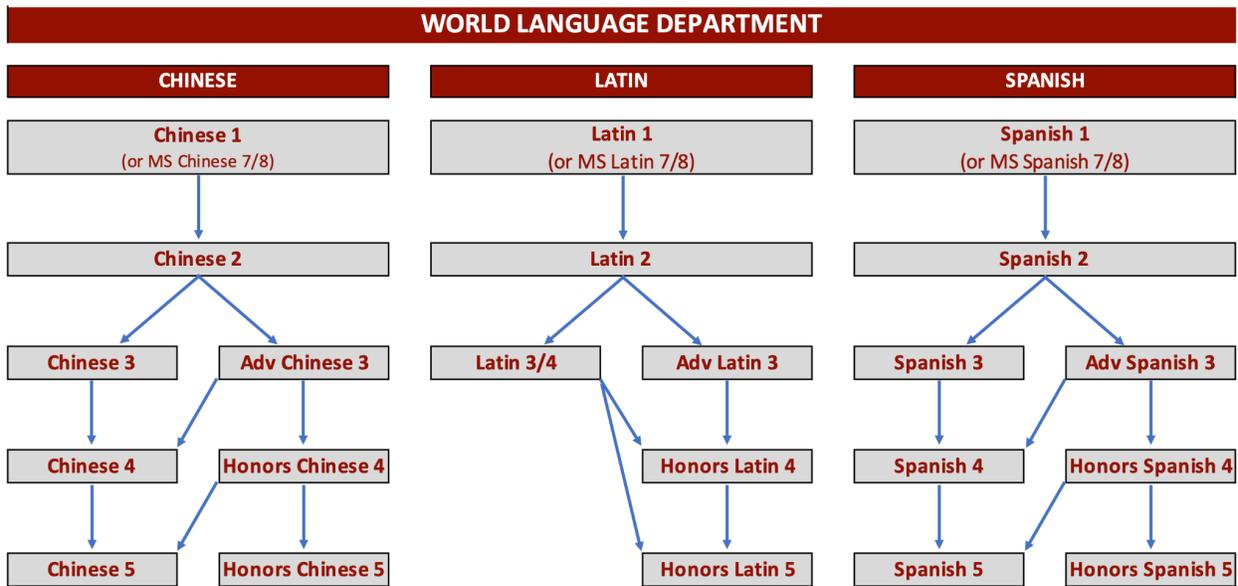
WORLD LANGUAGE DEPARTMENT

(3 Credits Required - Single Language/2 Credits Required - Two Languages)

The Columbus Academy’s World Languages Department offers language and culture instruction in order to enhance the students’ educational experience. The department fosters the ability to communicate successfully in another language and to engage with different cultures. Through the study of language and cultures, students develop open-mindedness, a sense of community, an appreciation of differences, and the ability to embrace multiple perspectives.

In order to graduate, students in Upper School must complete through level three of Chinese, Latin or Spanish, respectively. Students can also elect to complete through level two of one language and then through level two of another in order to satisfy the graduation requirement. Beyond the requisite coursework, students usually take a language though their senior year.

Upper School world language classes emphasize three modes of communication: interpretive, interpersonal and presentational. Students read, listen, speak and write about authentic texts, history, customs, and current events.



CHINESE 1 (Full Year, 1 Credit)

Chinese 1 is a yearlong course in Beginning Chinese. The course is designed for students who have had no prior exposure to Chinese language. It offers introduction to the pinyin system, fundamental grammatical structures, basic vocabulary and character forms of modern standard Chinese (Mandarin). Emphasis will be placed on all four skills (listening, speaking, reading and writing). While linguistic aspects of the Chinese language are the primary focus, introduction to the social and cultural background of the language will also form an important part of study, which are embedded with the five C’s of foreign language learning: communication, cultures, connections, comparisons, communities. *Students will be expected to earn at least a C and have a faculty recommendation in order to advance to Chinese 2.

CHINESE 2 (Full Year, 1 Credit)

Chinese 2 is designed for students who have had exposure to the Chinese language that includes the sound system, essential grammatical structures, basic vocabulary and character forms of modern standard Chinese (Mandarin). The emphasis in this class is on continuing vocabulary growth and sentence patterns in communicative contexts, and building a solid foundation in pronunciation. Students will expand their ability to carry out simple conversations in Chinese on a limited range of topics. Reading and writing (using simplified characters) will be developed in conjunction with speaking and listening skills. Students will be expected to speak, read, and write all new words that appear in vocabulary lists in the main textbook to continue to Chinese 3 unless otherwise noted by the instructor.

Prerequisite: A final grade of C or higher in Chinese 1 and faculty recommendation

CHINESE 3 (Full Year, 1 Credit)

Chinese 3 is designed to develop and refine proficiency in all four language skills – reading, writing, listening, and speaking. Conducted mainly in Chinese, this course includes grammar review, vocabulary development, and engages students in communicative exercises. Learning materials include a selection of contemporary articles as well as literary, cultural, and multimedia texts. Reports and oral presentations strengthen student understanding of the target language. This course completes the world language graduation requirement.

Prerequisite: A final grade or final exam grade of at least a C in Chinese 2 and faculty recommendation

ADVANCED CHINESE 3 (Full Year, 1 Credit)

Advanced Chinese 3 is the third-year study of Mandarin Chinese. This course is designed to develop and refine proficiency in all four language skills. Conducted entirely in Chinese, Advanced Chinese 3 includes grammar review, vocabulary development and engages students in communicative exercises. Reading materials include a selection of contemporary articles and literature, as well as culturally authentic texts, such as short stories, newspaper articles, and Chinese idioms. Reports and oral presentations strengthen understanding of the target language. This course not only completes the World Language graduation requirement, but is also designed to prepare students for standardized national foreign language testing.

Prerequisite: A final grade of A- or higher in Chinese 2 and/or faculty recommendation

CHINESE 4 (Full Year, 1 Credit)

This course is designed for students who have completed the foreign language requirement and wish to build on their Chinese language proficiency and cultural understanding. The students will expand their vocabulary and grammatical structures while integrating five skills: listening, speaking, reading, writing and character recognition through typing. Taught in Chinese, the content includes current issues, idioms, literature, and cultural topics in the target language. The materials include films, songs, online materials and news.

Prerequisite: A final grade of C or higher in Chinese 3 or Advanced Chinese 3 and/or faculty recommendation

HONORS CHINESE 4 (Full Year, 1 Credit)

Honors Chinese 4 is a Pre-Advanced Placement course that is in alignment with the Advanced Placement format. The course is designed for students who are interested in pursuing higher language proficiency in listening, speaking, reading, writing and character typing skills. Taught completely in Chinese, the students will honor the language pledge. The course focuses on the language through the lens of Chinese culture. Honors Chinese 4 emphasizes the development of cohesive speaking and writing skills through the building of rich vocabularies and complex sentence structures. Course

materials include idioms, tang and song poems, current issues, cultural topics, films, and pop culture in the target language. Communicating with exchange students in China through email is included as one of the learning objectives.

Prerequisite: A final grade of A- or higher in Advanced Chinese 3 and/or faculty recommendation

CHINESE 5 (Full Year, 1 Credit)

Chinese 5 is designed as a natural sequence to Honors Chinese 4. The course consists of extensive communicative drills, the study of complex sentence patterns and grammar, and reading and writing. The class is conducted in Chinese and uses natural tones and speed for listening comprehension. The textbook is of an intermediate level, and the students are able to maintain their language skills and make transition to a mid-second year college course. The students are introduced to formal written language and they keep up with Chinese current issues with authentic materials. By the end of fifth year Chinese, most Chinese language students will have some language immersion experiences from our trips abroad.

Prerequisite: A final grade of C or higher in Chinese 4 or Honors Chinese 4 and/or faculty recommendation

HONORS CHINESE 5 (Full Year, 1 Credit)

Honors Chinese 5, an Advanced Placement course, consists of intense speaking drills, the study of complex sentence patterns and grammar, advanced reading, and advanced writing. Conducted in Chinese, the course uses a college textbook, authentic materials, and is at an upper intermediate level. Activities include debating, giving campaign speeches, presenting career choices, and covering cultural topics in depth. Students are introduced to formal written language and classics reading, and they keep abreast of current Chinese issues. Upon completion, students will comfortably transition to a late-second or third year college course. By the end of Chinese 5, almost all Chinese language students will have taken a trip to China and will have benefitted greatly from participating in a trip abroad. This course also prepares students to take the Chinese Advanced Placement Examination.

Prerequisite: A final grade of A- or higher in Honors Chinese 4 and/or faculty recommendation

LATIN 1 (Full Year, 1 Credit)

Latin 1 stresses reading and translation, the mastery and pronunciation of Latin vocabulary, basic grammatical structures, the building of a stronger English vocabulary and grammar through study of the relationship of the two languages, and an introduction to ancient mythology and Roman history. Special attention is paid to developing English vocabulary through the study of Latin roots. Students learn to understand 4 main verb tenses, the basics of noun declension, and simple prepositional phrases. *Students will be expected to earn at least a C in order to advance to Latin 2.

LATIN 2 (Full Year, 1 Credit)

Latin 2 is a continuation of Latin 1 with the general philosophy remaining unchanged: reading Latin with confidence, providing insight into Roman culture, and improving English skills through the study of Latin. Greater attention is paid to sustained reading with emphasis on more sophisticated grammatical and syntactical structures, including passive verbs, participles, and subjunctive constructions. In addition, the content of the stories and the cultural material are used as a basis for oral discussion stressing the comparisons and contrasts between the elements of ancient Roman society and today's society.

Prerequisite: A final grade of C or higher in Latin 1 and/or faculty recommendation

LATIN 3/4: Topics in Latin Literature (Full Year, 1 Credit)

This course is a continuation of students' Latin studies, with the opportunity to explore a variety of topics in original Latin literature. Topics will rotate each semester, and previously learned grammar will be reviewed in context. Authors and topics may include Caesar's *De Bello Gallico* and the war in Gaul, Catullus and his poetry, ghosts and ghost stories in Pliny, and Vergil's retelling of the Trojan War in the *Aeneid*.

Prerequisite: A final grade of C or higher in Latin 2 and/or faculty recommendation

ADVANCED LATIN 3 (Full Year, 1 Credit)

Advanced Latin 3 is an introduction to Latin prose and poetry with an emphasis on Roman historical texts. Attention is paid to developing sustained reading of original Latin texts, and the most complicated aspects of Latin grammar are introduced. Students read works by Eutropius, Pliny, and Catullus. This course not only completes the World Languages graduation requirement, but also introduces the first units of the Advanced Placement curriculum which will be continued in Honors Latin 4.

Prerequisite: A final grade or final exam grade of at least A- in Latin 2 and/or faculty recommendation

HONORS LATIN 4 (Full Year, 1 Credit)

Honors Latin 4 is a course that offers an intensive study of Latin prose and poetry with an emphasis on the letters of Pliny and Vergil's *Aeneid*. By the end of this course, students will be able to translate large sections of prose and poetry with comprehension, scan dactylic hexameter, recognize rhetorical devices and figures of speech and contextualize the literature they read within Rome's social and political milieu. The pace and scope of this course provides the student with the opportunity to take the Advanced Placement Exam, if they choose.

Prerequisite: A final grade of A- or final exam grade of at least a B+ in Advanced Latin III and/or faculty recommendation

HONORS LATIN 5 (Full Year, 1 Credit)

Honors Latin 5 is a seminar-style class designed for students who have completed the four-year Latin program. The course consists of critical reading and evaluation of literary works. Grammar is thoroughly reviewed. Emphasis is placed on lyric poetry, philosophy, and comedy.

Prerequisite: A final grade of C or higher in Latin 4 or Honors Latin 4 and/or faculty recommendation

SPANISH 1 (Full Year, 1 Credit)

In Spanish 1, students are given the vocabulary and grammar tools necessary to express themselves in everyday communicative tasks using both the present and past tenses. Emphasis is put on the basic language skills of reading, writing, speaking, and listening, and on the principles embodied in the five C's of foreign language: communication, cultures, connections, comparisons, and communities. This course is designed for the student with no previous knowledge of the language; it can, though, also be used as a review of Spanish studied previously. *Students will be expected to earn at least a C and have faculty recommendation in order to advance to Spanish 2.

SPANISH 2 (Full Year, 1 Credit)

Spanish 2 is conducted in Spanish and is a continuation and expansion of the vocabulary and grammatical structures learned in Spanish 1. Students will be able to communicate utilizing all tenses to express past, present, and future as well as opinions and hypotheticals. Students participate in conversations, discussions, and oral and writing exercises. The students are exposed to authentic materials such as news articles, music, television commercials, soap operas, as well as literary selections

like poetry and short stories. Students will be expected to achieve at least a C in order to continue to Spanish 3 and/or an A- to continue to Advanced Spanish 3.

Prerequisite: A grade of C or higher in Spanish 1 and faculty recommendation

SPANISH 3 (Full Year, 1 Credit)

Spanish 3 is designed to develop and refine proficiency in all four language skills – reading, writing, listening and speaking. Conducted entirely in Spanish, it includes grammar review, vocabulary development, and engages students in communicative exercises. Reports and oral presentations strengthen proficiency skills of the target language. This course completes the world language graduation requirement.

Prerequisite: A final grade or final exam grade of at least a C in Spanish 2 and/or faculty recommendation.

ADVANCED SPANISH 3 (Full Year, 1 Credit)

Advanced Spanish 3 is designed to develop and refine proficiency in all four language skills – reading, writing, listening, and speaking. Conducted entirely in Spanish, it includes grammar review, vocabulary development, and engages students in communicative exercises. Reading materials include a selection of *Harry Potter and the Sorcerers' Stone*. Reports and oral presentations are used to strengthen proficiency skills of the target language. This course not only completes the world language graduation requirement; it is also designed to prepare students for standardized national foreign language testing.

Prerequisite: A final grade or final exam grade of at least A- in Spanish 2 and/or faculty recommendation.

SPANISH 4 (Full Year, 1 Credit)

Spanish 4 is designed for students who are interested in pursuing higher language proficiency in listening, speaking, reading, and writing. Students will communicate with native speakers, write about selected literary topics, and discuss current events and personal issues with relative ease. Taught completely in Spanish, this course also includes a review of advanced Spanish grammar. After completing extensive reading, students will produce written projects and present oral reports.

Prerequisite: A final grade of at least C in Spanish 3 and/or faculty recommendation

HONORS SPANISH 4 (Full Year, 1 Credit)

Honors Spanish 4 is a Pre-Advanced Placement course that is in alignment with the Advanced Placement format. The course is designed for students who are interested in pursuing higher language proficiency in listening, speaking, reading, and writing. Students will communicate with native speakers, write about selected literary topics, and discuss current events and personal issues with relative ease. Taught completely in Spanish, this course also includes a review of advanced Spanish grammar. After completing extensive reading, students will produce written projects and present oral reports. Students will prepare for the SAT Subject Test based on instructor's recommendation. Honors Spanish 4 is designed for students interested in taking the Spanish Language Advanced Placement Examination in the following year.

Prerequisite: A final grade of at least A- in Advanced Spanish 3 and/or faculty recommendation

SPANISH 5 (Full Year, 1 Credit)

Spanish 5 is designed as a continuation and expansion of Spanish 4. It is a course for students not interested in taking, or ready to take, the Advanced Placement Examination who desire to develop further knowledge of Spanish grammar, vocabulary, and conversation skills in the context of a broad study of Spanish history and culture. Special emphasis is placed on current events. At this level,

research papers, reports, and oral presentations integrating technology are important ways of developing the students' presentation skills, cultural awareness, and language proficiency.

Prerequisite: A final grade or final exam grade of at least C and/or faculty recommendation

HONORS SPANISH 5 (Full Year, 1 Credit)

This intense course is intended to prepare students for the Advanced Placement Examination. Students at this level are studying a course equivalent to a third-year college course in advanced Spanish composition and conversation. According to the College Board standards, this course emphasizes the use of Spanish for active communication, and it encompasses aural/oral skills, reading comprehension, grammar, and composition. The overall objectives are: to comprehend formal and informal spoken language, to acquire vocabulary and a grasp of structure to allow the easy and accurate reading of newspaper/magazine articles and modern literature in Spanish, to compose expository passages, and to express ideas orally with accuracy and fluency. This course also seeks to develop language skills that are broadly useful and that can be applied to various activities and disciplines.

Prerequisite: A final grade of at least B+ in Honors Spanish 4 and/or faculty recommendation

FINE AND PERFORMING ARTS DEPARTMENT (1 Credit Required)

The goal of the Fine and Performing Arts is to foster students' art education in a positive and productive atmosphere. It encourages both creativity and critical thinking while expecting artistic excellence and self-discovery. It strives to develop the whole child through enjoyment, exploration, and understanding of Art, Music, and Theater. While developing this sense of artistic fluency, students learn multiple models of self-expression and cultivate their role in an ever-changing cultural environment; they learn that the Arts are an essential and enduring part of the global human experience.

FOUNDATIONS OF STUDIO ART (Full Year, 1/2 Credit)

In this course, students study the formal elements and principles of design and composition as well as selected artists and styles through a variety of techniques and mediums. **Foundations of Studio Art is a prerequisite for all Fine Arts courses.**

2-D STUDIO ART (Full Year, 1/2 Credit)

This studio-based course explores the techniques, composition, and content of drawing and painting. Students study the works of past and contemporary artists' works and become acquainted with a variety of drawing materials and opaque and transparent painting mediums. Students are asked to express growth and individuality through their use of materials. Keeping an up-to-date, high-quality personal sketchbook is a requirement. Students who wish to take this class for a second time should request **2DSTART2**.

Prerequisite: Foundations of Studio Art or Portfolio

CERAMICS 1 (Full Year, 1/2 Credit)

Ceramics 1 is an introduction to making functional vessels on the potters' wheel as an expressive art. Students will focus on physical throwing skills, three-dimensional design concepts and creative problem solving as they relate to the functional ceramic vessel. Over the course of the school year, students will make cylinders, bowls, mugs, lidded jars, and sculptural vessels.

Prerequisite: Foundations of Studio Art

CERAMICS 2 (Full Year, 1/2 Credit)

Ceramics 2 is an intermediate studio course. Students will continue their understanding of the decorative and functional arts on the potters' wheel. Over the course of the school year, students will work with stoneware and porcelain to create teapots, large vessels, and intricate sets of work. Students will also learn the process of how to mix clay, glazes, and fire gas and electric kilns.

Prerequisite: Ceramics 1

CERAMICS 3 (Full Year, 1/2 Credit)

This course provides opportunities for intense studio experiences and portfolio development. Students are encouraged to participate in local and statewide competitions. Students must be self-motivated as the workload is demanding. Upon electing to take this class, students declare a major area of study. **This course is available to Juniors/ Seniors only.**

Prerequisite: Previous art experiences and the recommendation of the instructor.

CERAMIC SCULPTURE (Full Year, 1/2 Credit)

Ceramic Sculpture is a studio-based introduction to hand-built ceramic sculpture. Students will learn various methods of working with clay including coil, slab, solid, and extruded forms. Students will

explore surface design and texture with paints, glazes, and mosaic work. Emphasis will be placed on technical skill, the relationship of form to concept, and the processes used in making ceramic sculpture. Students will make abstract, representational, and human/animal sculptures.

Prerequisite: Foundations of Studio Art

GRAPHIC DESIGN (Full Year, 1/2 Credit)

This course introduces students to the art of visual communication through images, symbols, and text. Students will work to represent ideas and deliver messages through visual compositions. Adobe Illustrator and InDesign will be used to learn the importance of graphics, typography, and layouts. Traditional hands-on techniques will be combined with digital processes for a fully immersive experience.

Prerequisite: Foundations of Studio Art

PHOTOGRAPHY 1 (Full Year, 1/2 Credit)

Photography 1 students learn about the various functions of the camera as well as how to control composition and exposure to produce excellent images. The emphasis will be on capturing images digitally and manipulating them through the use of Photoshop and other photo editing applications.

Prerequisite: Foundations of Studio Art

PHOTOGRAPHY 2 (Full Year, 1/2 Credit)

Second-year photography students are encouraged and expected to develop a body of images that demonstrate a high level of conceptual thought, originality, technical skill, and personal vision. The Photography 2 course emphasizes creative thinking and individual expression through independent work on conceptually themed projects.

Prerequisite: Foundations of Studio Art and Photography 1

PORTFOLIO ART (Full Year, 1 Credit)

This course provides opportunities for intense studio experiences and portfolio development. Students are encouraged to participate in local and statewide competitions. Students meet daily and must be self-motivated as the workload is demanding. Upon electing to take this class, students declare a major area of study. **This course is available to Juniors/ Seniors only.**

Prerequisite: Previous art experiences and the recommendation of the instructor.

SCULPTURE (Full Year, 1/2 Credit)

The emphasis in this studio course is on the unique qualities of sculpture, including its three-dimensional and tactile nature. Assignments focus on specific realistic and/or abstract problems. The work of well-known artists is studied in order that the students see both the practical and the creative aspects of sculpting. Students complete their projects using materials such as plaster, wood, and metal.

Prerequisite: Foundations of Studio Art

ART HISTORY (Full Year Elective, 1/2 Credit)

This course is a survey covering two and three-dimensional art forms and architecture from prehistory to the present. The vision and record of artists and designers are emphasized. At its conclusion, students should have a greater appreciation for creative personal expression and be prepared to look at art insightfully. *The History of Art: A Global View* (Robertson/Hutton) is the primary text. Supportive studio exercises and writing compliment classes. Independent study offers the opportunity for students to consider taking the Advanced Placement Examination.

TREBLE CHOIR (Full Year, 1/2 Credit)

Treble Choir is open to soprano/alto singers in grades 9-12. This course is recommended for soprano/alto students who are new to the choir program, Upper School and/or to Columbus Academy.

Students will learn:

- Sight reading skills
- Healthy singing, including breath support and quality of tone
- Interpretation of music including: tempo, phrasing, expression, style, and dynamics.
- A variety of quality choral literature
- Proper music technique including: note accuracy, rhythmic accuracy, articulation, diction, and posture
- Intonation, including how to blend and balance with an ensemble
- The Treble Choir will perform at the Fall Concert, Winter Concert, Cabaret, and Commencement. Members of this group are also eligible to compete in OMEA Solo and Ensemble. Instructor approval is needed if a student can only schedule 2 of the 3 class meetings during the 6-day rotation.

TENOR/BASS CHOIR (Full Year, 1/2 Credit)

Tenor/Bass Choir is open to tenor/bass singers in grades 9-12. This course is recommended for tenor/bass students who are new to the choir program, Upper School and/or to Columbus Academy.

Students will learn:

- Sight reading skills
- Healthy singing, including breath support and quality of tone
- Interpretation of music including: tempo, phrasing, expression, style, and dynamics.
- A variety of quality choral literature
- Proper music technique including: note accuracy, rhythmic accuracy, articulation, diction, and posture
- Intonation, including how to blend and balance with an ensemble
- The Tenor/Bass Choir will perform at the Fall Concert, Winter Concert, Cabaret, and Commencement. Members of this group are also eligible to compete in OMEA Solo and Ensemble. Instructor approval is needed if a student can only schedule 2 of the 3 class meetings during the 6-day rotation.

CAMERATA (Full Year, 1 Credit)

Camerata is a course for any returning soprano, alto, tenor, or bass singer, **mostly in grades 10** through 12 (including participation in CA's 8th grade choir). This course emphasizes skills required to be a strong ensemble singer including: performance skills, rehearsal technique, vocal technique, and musicianship. Camerata also focuses on music theory and sight-reading skills to enhance singers' ability to analyze and perform choral music. **All students will be asked to perform a vocal assessment to determine the best vocal fit.**

Students will learn:

- Sight reading skills
- Healthy singing, including breath support and quality of tone
- Interpretation of music including: tempo, phrasing, expression, style, and dynamics
- A variety of quality choral literature
- Proper music technique including: note accuracy, rhythmic accuracy, articulation, diction, and posture
- Intonation, including how to blend and balance within an ensemble

Students meet 6 days out of 6. Camerata will perform at the Fall Concert, Winter Concert, Cabaret, and Commencement. Depending on the year, Camerata may also compete at OMEA Large Group Competition. Members of this group are eligible to compete in OMEA Solo and Ensemble.

Prerequisite: Recommendation of the instructor

CONCERT BAND (Full Year, 1 Credit)

The Concert Band is open to all. An evaluation may be requested to determine the student's proficiency. The Concert Band performs in at least three required concerts, which may include OMEA District Contest for Large Group as well as the OMEA Solo and Ensemble Contest. Concepts covered include intonation, tone development and articulation, rhythmic literacy, and ensemble techniques (i.e. blend and balance).

- Pep Band - performs popular music at home football games and a few select weekend basketball games as well as pep rallies.
- Concert Band – performs at fall, winter, and spring concerts levels of music comparable to OMEA Class C and B band music as well as various film and contemporary band music. Also performs at Commencement in June.
- Solo & Ensemble - students are encouraged to participate in this event, though it is not mandatory and does not affect a student's grade.

JAZZ ENSEMBLE (Full Year, 1/2 Credit)

The Jazz Ensemble, a course with advanced weighting, offers students an opportunity to explore the Jazz experience in both performance and musicianship. More advanced instrumental experience is strongly recommended for this course; an audition required for all instrumentalists. Students perform in a number of settings, including the spring's All That Jazz dessert concert, a Fall concert, a winter concert, and various festivals around Ohio. Although this course is open to freshmen and advanced middle school musicians, a full year of Concert Band is highly recommended. Jazz Ensemble is considered an advanced course and requires a moderate amount of home practice. This class meets during zero period (7:15-8:00am) Mondays, Tuesdays, and Thursdays with occasional Friday rehearsals.

- Styles covered include swing, latin, rock, samba, ballad, be-bop, and blues
- Artists covered include Duke Ellington, Count Basie, Dizzy Gillespie, Herbie Hancock, Glenn Miller, Benny Goodman, and Miles Davis
- Improvisation is a major component of this course and will be taught through the Blues as well as other forms
- Solo & Ensemble- students are encouraged to participate in this event, though it is not mandatory and does not affect a student's grade.

CONCERT ORCHESTRA (Full Year; 1/2 Credit)

Concert Orchestra is open to students in Grades 9-12. This class focuses on repertoire for high school orchestras including music from an assortment of genres such as pop, rock, classical, and jazz. Performances typically include at least three major concerts, OMEA solo and ensemble competition, and community concerts. Touring trips are planned every three years.

ADVANCED ORCHESTRA (Full Year; 1 Credit)

Advanced Orchestra is open to students in Grades 9-12. This class focuses on original music from classical and contemporary periods. Performances typically include at least three major concerts, large group contest, solo and ensemble competition, and community concerts. This class receives weighted grades. Touring trips are planned every three years. **Students are accepted by audition or recommendation.**

MUSIC THEORY (Full Year, 1/2 Credit) ****Will be offered during the 2027-28 school year****

The first year of Music Theory introduces the fundamentals of music including, but not limited to, notes, rhythm, intervals, chords, and voice leading. At the end of the course, students will be able to analyze music written in four-part harmony (Bach-style) as well as compose their own four-part harmonic pieces. Units covered include:

- Note literacy
- Rhythmic literacy
- Intervals
- Chord structures
- Figured Bass, Roman Numeral Analysis
- Voice leading
- Composing melodies
- Chord progressions

HONORS MUSIC THEORY (Full Year, 1/2 Credit)

The second year of Music theory continues to build upon the fundamentals of music. Areas of study in Honors Music Theory, a course that receives honors weighting, focus heavily on aural skills rather than the analytic, written work of Music Theory 1. Students may be asked to take an entrance exam to be admitted to Honors Music Theory. At the end of this course, students will be ready to take the AP Music Theory Exam (not required). **Prerequisite: Music Theory and Teacher Recommendation**

Units covered include:

- Sight-singing using Solfege
- Melodic Dictation
- Harmonic Dictation
- Secondary Dominants
- Non-Chord Tones
- Basic Form and Analysis
- Error Detection (aural)
- Modal concepts
- Forms (Sonata, AABA, etc.)
- Performance concepts (tempos, techniques, etc.)

TECHNICAL THEATRE (Full Year, 1/2 Credit)

PORTFOLIO TECHNICAL THEATRE (Full Year, 1 Credit)

This class is for students who are looking for a deeper understanding of “the other side of the stage”. The Portfolio Technical Theatre class meets 5 times per 6-day rotation. The Technical Theatre course meets 3 times per 6-day cycle. This is an Independent Study course that will allow students who are interested in theater to further their studies within a specific field. Each student will take on a technical responsibility for at least two Columbus Academy productions, requiring time outside of class attending technical rehearsals and performances. The specific field or interest will be decided by the student and instructor. Students will develop a portfolio showcasing each individual’s work within their field of interest which can also be used for college entrance applications. These classes are limited to a total of 16 students. Students will explore projection, sound, lights, set, props, costumes and stage management. Foundations of Studio Art is strongly recommended.

Prerequisite: Interview and instructor approval required. Students are able to repeat this course yearly.

ACTING & DIRECTING INTENSIVE (Full year, 1/2 credit)

This class is for students who have a committed interest in theatre, plan to study theatre in college as a major, minor, or elective study, and/or want to pursue the performing arts as an adult. Students will explore classical and modern acting techniques for the stage, practice advanced scene study, and create an audition portfolio. Students will hone their craft with physical training techniques such as Viewpoints, as well as explore ways of devising and advanced improv techniques. Students will also learn the ins and outs of directing for the stage, covering topics such as: script analysis, pre-production planning, how to run auditions, blocking methods, and interpersonal skills. Projects in this course will be crafted to the individual needs, skill level, and interests of the student, and could provide material for college auditions and portfolios.

Prerequisite: Open to Juniors and Seniors only. Students must show a vested interest in the CA theatre program. Students are able to repeat this course if they so choose.

MUSICAL THEATRE WORKSHOP (Full Year, 1/2 credit)

Students will explore the interconnected skills of acting, dance, and music necessary for storytelling through modern American musical theatre. Students will explore how to create dynamic acting moments through scenes and songs, while exploring dance techniques such as tap, jazz, and original choreography, characterization, and blocking to create the world of the story. Students will learn both performance and analysis methods through 1-on-1 coaching and collaborative feedback, as well as the history of famous scripts, authors, lyricists, composers, and adaptations. Projects in this course will be crafted to the individual needs, skill level, and interests of the student, and could provide material for auditions and portfolios. This course is open to students in Grades 9-12.

Pre-requisite: Experience or curiosity in musical theatre. Students are able to repeat this course if they so choose.

ADDITIONAL REQUIRED AND ELECTIVE COURSES

ETHICS AND COMMUNITY (Full Year – REQUIRED for Grade 10)

This course focuses on building the knowledge and skills necessary for well-being and positive community contribution. Students begin by identifying their current character strengths, which are expected to evolve with life circumstances. The course emphasizes using these strengths positively, exploring moral identity and values that guide long-term identity development. It incorporates concepts from positive psychology and education, highlighting six categories of human flourishing: purpose, engagement, relationships, health, emotions, and accomplishment. Special focus is placed on positive emotions and relationships, with skill development in these areas prioritized. Students also learn and practice making ethical decisions, applying their character strengths in meaningful ways. By integrating these elements, the course aims to help students lead healthy, meaningful, and flourishing lives.

FRESHMAN RESEARCH (Full Year – REQUIRED for Grade 9)

Emphasizing guided inquiry and the research process, the Freshman Research class will introduce students to research and study skills that will compliment research that is required in many of their other classes. This course will build a foundation for thinking critically and conducting more in-depth research as they progress through high school. Topics include choosing, narrowing and broadening topics; gathering, identifying, evaluating, and organizing many types of information; proper citation; and digital citizenship (copyright, plagiarism, fake news).

HEALTH (Full Year, 1/4 Credit – REQUIRED for Grade 9)

The Health curriculum is based on the concept of providing the knowledge and skills necessary for students to make responsible, well-informed choices that promote a healthy lifestyle. The students are encouraged to take personal responsibility and to utilize critical thinking skills when looking at current health topics and how they impact their daily lives. Topics include personal and mental health, drug and alcohol prevention, stress management, eating disorders, human growth and development, relationships, sexually transmitted diseases, cancer awareness and early detection, and CPR certification. Students will participate in a variety of teaching and learning methods such as class discussions, role-playing, videos, projects, tests, and demonstrations.

JOURNALISM 1 (Semester 1 or 2 Elective, 1/4 Credit)

This one-semester course introduces students to the writing requirements for *The Academy Life*. Exercises include reporting strategies and opinion guidelines. **This course is a prerequisite for staff positions on the school's newspaper.**

JOURNALISM 2, 3, or 4 (Full Year Elective, 1/4 credit)

Students on the school newspaper's staff meet during a zero-period class and cover school events of opinion pieces each week.

Prerequisite: Journalism 1

JOURNALISM EDITOR 3 or 4 (Full Year Elective, 1/2 credit)

In addition to their required coverage of school news, co-editors meet twice a week during a zero-period class to edit staff submissions and compose editorials.

Prerequisite: Journalism 1 and 2

PUBLIC SPEAKING (One Semester, 1/4 Credit – REQUIRED for Grade 11)

Public Speaking, a required course for juniors, introduces students to various techniques of oral expression. Each student learns to overcome natural fears and speak with relative ease, clarity and organization. Enunciation, expression, eye contact, volume, poise, and the content of each presentation are evaluated. A formal speech, delivered to the Upper School and parents, fulfills a graduation requirement and upholds one of Columbus Academy's oldest traditions.

SPEECH 1 (Semester 1 Elective, 1/4 Credit)

This beginning Speech course introduces students to Declamation, which is the performance of a speech someone else has written and performed. Students will research topics and select a speech of their choice to memorize and perform. Students new to Speech might have the option to compete in local tournaments, beginning in November. Students who complete this course may register for Speech & Debate in the following school year.

DEBATE 1 (Semester 2 Elective, 1/4 Credit)

This beginning Debate course introduces students to the formats in Public Forum, Lincoln-Douglas, and Congress. Students will practice the techniques required for each of these categories and have weekly assignments. Students who complete this course may register for Speech & Debate in the following school year.

SPEECH AND DEBATE 2, 3 or 4 (Semester 1 Elective, 1/2 Credit)

Students in this zero-period class select a Speech category of their choice for the fall and winter competitions that begin in November, and complete weekly written assignments.

Prerequisite: Speech 1, Debate 1 or permission of the instructor.

YEARBOOK (Full Year Elective, 1/4 credit)

This is a full-year class for 1st, 2nd, and 3rd year Caravel staff members. The yearbook is a long-standing Academy tradition dating back to 1916 and has evolved over time into an over 300-page reflection on the year past. Caravel staff who are enrolled in this class are required to create content pages in assigned categories. The ability to work independently and meet deadlines is required; space is limited to 20 students.

YEARBOOK EDITOR (Full Year Elective, 1/2 credit)

This is a full-year class for 4th year Caravel staff members. The yearbook is a long-standing Academy tradition dating back to 1916 and has evolved over time into an over 300-page reflection on the year past. Caravel editors will be integral in the design process, providing input on the overall direction of the yearbook style guide, layout and design, and assisting with the editorial process. The ability to work independently and meet deadlines is required. Some mandatory meetings outside of allotted class time may be required.

Prerequisite: YEARBOOK

GLOBAL ONLINE ACADEMY (One Semester or Full Year Elective)

Columbus Academy is a member school of Global Online Academy (GOA), a not-for-profit consortium of more than 120 independent schools from around the world. Started by a group of independent schools looking to bring the benefits of online learning to their teachers and students, GOA prepares students for a global future by providing new, modern ways for students to learn and teachers to teach. The mission of Global Online Academy is to reimagine learning to empower students and educators to thrive in a globally networked society; to deepen learning through courses that equip students with the knowledge, skills, and dispositions to be successful in high school, college, career, and life. GOA teachers think differently about how they design student learning experiences

and learn from working with educational leaders to ensure they have the strategies and tools to lead innovation and change.

[Global Online Academy](#)

MALONE SCHOOLS ONLINE NETWORK (One Semester or Full Year Elective)

The Malone Schools Online Network (MSON) provides motivated upper-level students at participating Malone Schools with many academically challenging courses that enhance each member school's existing curriculum. These interactive seminars bring students together from across the country with dedicated teachers in real time. MSON joins the best of independent school education with the latest video conferencing technology to chart new territory in online learning. Unlike GOA classes with more flexible schedules for asynchronous lessons and synchronous group work, MSON classes meet **synchronously online on two specific weekdays in one-hour blocks**. Rising juniors may apply for any fall, spring, or year-long MSON classes that do not conflict with their CA schedule. Rising seniors may apply for any fall courses.

[MSON Course Catalog](#)

Grade Weighting System

A sliding scale of grade weighting is used to determine grade point average (GPA). Standard weighting on a four-point scale will be applied to normal college preparatory courses. An additional ten percent weight will be added to grades in “Advanced” courses, and an additional fifteen percent weight to grades in “Honors” courses. See the chart on the next page for listings of course weights.

Advanced courses indicate accelerated versions of our college-preparatory courses. **Honors** courses indicate those designed predominantly to prepare students for a college level, external examination. Courses that cover two years’ worth of material in one year are also included. Prerequisite criteria must be met for entry to Advanced and Honors courses.

Weighted (wGPA) grade point averages are reported on the transcript and on documents sent to colleges and scholarship agencies. The Columbus Academy does **not** calculate class rank.

Grading and Weighting Scale

Description	Grade	Scale %	Normal Unweighted	Advanced Weight +10%	Honors Weight +15%
Outstanding	A+	97-100	4.333	4.667	4.833
Superior	A	93-96	4.000	4.333	4.500
Superior	A-	90-92	3.667	3.999	4.167
Well Qualified	B+	87-89	3.333	3.666	3.833
Well Qualified	B	83-86	3.000	3.333	3.450
Well Qualified	B-	80-82	2.667	2.933	3.067
Qualified	C+	77-79	2.333	2.567	2.683
Qualified	C	73-76	2.000	2.200	2.300
Qualified	C-	70-72	1.667	1.833	1.917
Poor	D+	67-69	1.333	1.467	1.533
Poor	D	63-66	1.000	1.100	1.150
Poor	D-	60-62	0.667	0.733	0.767
Failing	F	Below 60	0.000	0.000	0.000
Passing	P		0.000	0.000	0.000
Outstanding	O		0.000	0.000	0.000
Incomplete	I		0.000	0.000	0.000
Withdrew	W		0.000	0.000	0.000

Note: Weighting shall not exceed a maximum of .33 additional weight in the 10% column or .50 additional weight in the 15% column.

Upper School Course Offerings

Department	STANDARD COURSES			ADVANCED COURSES	HONORS COURSES	
Full Credit/Half Credit	Unweighted			Weight + 10%	Weight + 15%	
English	English 9 English 10	English 11/12 (S1) English 11/12 (S2)		Advanced English 10	Honors English 11/12 (S1) Honors English 11/12 (S2)	
History	Human Geography/Human Geography Seminar Modern World History United States History Ancient Civilizations Modern Middle East Psychology International Studies (S1/S2) Japanese History (S1)				Honors Modern World History Honors United States History Honors African American Studies Honors Economics Honors Modern European History Honors Comp Government (S1) Honors U.S. Government (S2)	
Mathematics	Integrated Algebra & Geometry Geometry Algebra 2 Precalculus			Advanced Algebra 2 Advanced Precalculus Advanced Calculus Advanced Statistics	Honors Algebra 2 & Precalculus Honors Calculus 1 Honors Calculus 2 Honors Calculus 1 & 2 Honors Calc-Based Probability & Statistics Honors Linear Algebra Honors Multivariable Calculus	
	Computer Science: Programming in Java (S1) Data Science (S1) Computer Science: Programming in Processing (S1/S2) Artificial Intelligence (S2)			Advanced Computer Science - Object-Oriented Programming (S2) Advanced Data Science Applications (S2)	Honors Computer Science: Data Structures Honors Computer Science: Machine Learning Honors Topics in Computer Science	
Science	Biology Chemistry Physics Environmental Science Engineering: Application & Design (S1/S2) Robotics & Electronics (S1/S2, CS pre-req)			Advanced Anatomy & Physiology Advanced Biology Advanced Chemistry Advanced Physics 1	Honors Biology Honors Chemistry Honors Environmental Science Honors Physics Honors Synthetic Biology Research	
World Languages	Chinese 1 Chinese 2 Chinese 3 Chinese 4 Chinese 5	Latin 1 Latin 2 Latin 3 Latin 4	Spanish 1 Spanish 2 Spanish 3 Spanish 4 Spanish 5	Advanced Chinese 3 Advanced Latin 3 Advanced Spanish 3	Honors Chinese 4 Honors Latin 4 Honors Spanish 4	Honors Chinese 5 Honors Latin 5 Honors Spanish 5
Fine Arts	Foundations of Studio Art 2-D Studio Art 1, 2 or 3 Ceramics 1, 2 or 3 Ceramic Sculpture Graphic Design Photography 1 or 2 Portfolio Art Sculpture Art History					
Performing Arts	Treble Choir Tenor/Bass Choir Concert Band Music Theory (will be offered in 2027-28) Orchestra Technical Theater Portfolio Technical Theater Acting & Directing Intensive Musical Theatre Workshop			Advanced Camerata Advanced Jazz Ensemble Advanced Orchestra	Honors Music Theory	
Other Course Offerings	Journalism 1 (S1/S2) (0.25 credit) Journalism 2, 3 or 4 (0.25 credit) Journalism Editor 2, 3 or 4 Speech 1 (S1, 0.25 credit) Debate 1 (S2, 0.25 credit) Speech & Debate 2, 3 or 4 Yearbook (0.25 credit) Yearbook Editor <i>*Global Online Academy</i> <i>*Malone Scholar Online Network</i>					
Required Courses	<i>Ethics & Community (O/S/U)</i> <i>Freshman Research (O/S/U)</i> <i>Health (.25 credit)</i> <i>Public Speaking (.25 credit)</i>					

**Students must apply to take part in these course offerings.*