FLINT HILL SCHOOL

2023-24 Upper School Program Guide

The Program Guide provides an easy-to-reference resource for the course selection process. Possible academic paths in each department are included for course planning.

Please note that courses and activities offered in the guide are only planned offerings. If student interest does not meet certain enrollment thresholds, the class may be canceled.

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Mission, Vision and Core Values

Our Mission
A Flint Hill education focuses on the learner. Within a context of strong relationships, we create developmental experiences that embrace the best practices of traditional and contemporary education. Through continuous growth, we actively and thoughtfully implement the ideas and resources that help each student investigate, create and communicate collaboratively and effectively in a rapidly changing, interconnected world.

Our Vision for Every Student
Take meaningful risks. Be yourself. Make a difference.

Core Values
Flint Hill's core values are the fundamental principles that guide all interactions within our School community:

- Respect and value all equally
- Lead and support with compassion
- Act with integrity
- Imagine what's possible
- Blaze the trail

General Graduation Requirements

All students must earn a minimum of 20 credits in Upper School courses to qualify for a Flint Hill diploma. Courses are assigned the following credit values:

Full-year course	1.0 credit
Semester course	.5 credit
Quarter course	.25 credit
Term course *meets after school*	.5 credit

Credits required in each academic department are as follows:

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English	4 credits
History	3 credits, including U.S. History
Mathematics	**3 credits** in grades 9–12, with completion of Algebra II at a minimum
Science	**3 credits** (Physics, Chemistry and Advanced Biology)
Languages	Completion of Level 3 in one language ***OR*** completion of Level 2 in two different languages
Fine Arts	**1 credit** (2 semesters)
Human Development	**.25 credit** in grade 9

Activity Credit

The Flint Hill Activity Credit is a graduation prerequisite that addresses the physical education and team building requirements in a student's experience. We believe that activity outside of the classroom and alongside others within Flint Hill builds community, fosters camaraderie, introduces us to those we may not know, and helps to develop essential skills, habits and values. To that end, four activity credits must be earned during the Flint Hill Upper School experience.

Activity Credits through Designated Upper School Student Activities

Two of these credits **must** be earned by participating with a Flint Hill athletic team or non-competitive program. Students may choose to earn these two required credits through athletic participation or through approved participation in certain plays or musicals, the Major Minors musical group, Certamen, Yearbook Staff, Literary Magazine Staff, The View Staff, Robotics Teams or Cybersecurity after-school activity.

Students must apply to the directors or sponsors of these programs by June 30 of the year the student completes the activity. Proof of participation in all criteria set for that activity must be validated. The criteria for each activity can be acquired from the sponsor of that program.

Non-school sponsored athletic activities may not substitute for any of the four activity credits. While we encourage our students to be involved in healthy physical activity and competition whenever possible, we believe our students gain additional benefits and values by participating in Flint Hill programs.

Some exemptions to the requirements above were granted over the last two years due to the COVID-19 pandemic. Starting in the fall of 2022, all students are required to fulfill activity credit requirements as listed above.

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Community Service
Fifteen hours per year (60 hours total), of which five hours must be spent with organizations outside of the Flint Hill community.

Senior Project
The project should be successfully completed during the senior year.

Course Designations

Movement between and among courses in each of our academic programs is quite fluid and depends upon each student's relative areas of strength. At the end of each department's course listings, we present a list of possible course sequence paths for that subject. This list is not meant to be exhaustive; rather, it is intended to provide a general sense of the options available to students following the completion of a particular course and for their entire Upper School experience in that program. Some courses in our Program Guide have administrative enrollment controls that are initiated when limitations of space, faculty or other resources prevent us from accommodating all students who request them. Students must follow the administrative enrollment controls that are in effect for the semester in which the course will be offered.

Some courses are given special designations to indicate particularly unique aspects of their content, approach or approval process.

Advanced Placement (AP®)
The AP® program prepares students for a College Board examination in their chosen courses in early May. Superior skills in the fundamentals of the various subject areas are general prerequisites for entering AP® courses, along with very high levels of intellectual curiosity and motivation, solid analytical and reasoning abilities and a strong independent work ethic.

Flint Hill currently offers 24 AP® courses:

1. Biology
2. Calculus AB
3. Calculus BC
4. Chemistry
5. Computer Science A
6. Computer Science Principles
7. English Language and Composition
8. English Literature and Composition
9. Environmental Science
10. French Language and Culture
11. Human Geography
12. Latin
13. Macroeconomics
14. Microeconomics
15. Music Theory
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17. Physics 2: Algebra-Based
18. Physics C
19. Psychology
20. Spanish Language and Culture
21. Statistics
22. Studio Art: 3D Design - Ceramics
23. United States Government
24. United States History

Post-AP®

Post-AP® courses are courses that students may take only after they have taken the AP® course in the appropriate sequence.

Flint Hill currently offers three Post-AP® courses:

1. Latin Collegiate Seminar
2. Linear Algebra
3. Multivariable Calculus

Honors

Honors courses are typically presented at a more sophisticated, advanced level, generally preparing students for AP® courses in their junior and senior years. Students taking such courses are expected to exhibit a very strong work ethic, a high level of independence and intellectual curiosity, and a commitment to the higher intellectual demands of the course. Students may take honors courses with permission from the respective department.

Flint Hill currently offers 27 honors-level courses:

1. Advanced Aerial Robotics
2. Algebra II/Trigonometry
3. Art III
4. Contemporary World History I
5. Contemporary World History II
6. English I - Investigating Forms and Genres
7. English II - Exploring Literary Perspectives
8. Ethics in Literature
9. Film Criticism
10. French II
11. French III
12. Geometry
13. Latin II
14. Latin III
15. Latin IV
16. Literature for the Inquiring Mind
17. Portfolio Exhibition
18. Pre-Calculus
19. Shakespeare
20. Spanish II
21. Spanish III
22. Spanish IV
23. Topics in Ceramics
24. Topics in Dance
25. Topics in New Media
26. Writing Intensive: Fiction
27. Writing Intensive: Non-fiction

Online

Online courses provide students with individualized learning opportunities that allow for greater scheduling flexibility. Asynchronous lessons allow students to learn at their own pace according to a schedule that is convenient for them. Synchronous lessons allow for

more collaborative learning opportunities and direct access to the instructor. Enrolled students may not complete core courses for a Flint Hill diploma through online vendors.

Term Courses
Term courses have the same contact hours as semester courses, but are aligned with the athletic seasons and offered after school, typically from 3:30–6:00 p.m., twice a week. The instructor and the Director of the Upper School determine the specific meeting times.

Classics

Latin

Latin I
This course teaches Latin (first year) in a single academic year and is typically taken by an Upper School student who has not previously taken Latin in Middle School. The course encompasses a focused study of grammar, vocabulary and translation as well as an introduction to Roman history, culture, and world mythology. The study of derivation and word origin is an important aspect of this class. All students take the National Latin Exam in the spring to benchmark their progress against national standards and diverse programs across the country. **(Full year, 1 credit)**

Latin II
This course completes the basic grammar students began to learn in Latin I and incrementally increases the scope and difficulty of translation, with the ultimate goal of introducing Latin in the original. Roman history, culture, and world mythology are integrated through translations, projects, and class presentations. The study of derivation and word origin remains a central emphasis. All students take the National Latin Exam in the spring to benchmark their progress against national standards and diverse programs across the country. **(Full year, 1 credit)**

Latin II - Honors
This course completes the basic grammar students began to learn in Latin I and introduces many of the advanced concepts to be studied in Level III Latin. Students continue to develop translation skills by reading texts adapted from Roman authors. Students also reinforce translation skills by composing sentences in Latin. World mythology, Mediterranean history and culture (and its influences on all parts of the Ancient and modern world) are integrated through Latin texts as well as projects and class presentations. Students are expected to read works of increasing difficulty and lengths. The study of derivation and word origins remains a central emphasis. Students are

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expected to attend the Virginia Junior Classical League Latin Convention in the fall and take the National Latin Exam in the spring to benchmark their progress against national standards and diverse programs across the country. Students may take this course with departmental approval. **(Full year, 1 credit)**

Latin III

The first three quarters of this course focus on completing the grammar and vocabulary study needed to read authentic Latin. The final quarter continues to reinforce grammar, but does so by translating and reading Roman authors. Students identify grammatical structures in context and begin to analyze the works as literature in class discussions and individual essays. To that end, students learn the necessary meters and literary devices featured in authentic literature. Selections include both prose and poetry from the works of Catullus, Cicero, Livy and Ovid, among others. In general, the course addresses the history and culture of the late Republican period. The study of derivation and word origins remains a point of emphasis. All students take the National Latin Exam in the spring to benchmark their progress against national standards and diverse programs across the country. **(Full year, 1 credit)**

Latin III - Honors

The first semester of this course focuses on completing the grammar and vocabulary study needed to read authentic Latin. Students also reinforce translation skills by composing sentences in Latin. The second semester continues to reinforce grammar through translating and reading Roman authors. Students identify grammatical structures in context and begin to analyze the works as literature in class discussions and individual essays. To that end, students also learn the necessary meters and literary devices featured in authentic literature. Selections include both prose and poetry from the works of Catullus, Cicero, Livy and Vergil, among other authors. In general, this course addresses the history and culture of the late Republican period. The study of derivation and word origins remains a point of emphasis. In the final quarter, students explore the works of Vergil and Caesar. Students are expected to read works of increasing difficulty and lengths. Students are expected to attend the Virginia Junior Classical League Latin Convention in the fall and take the National Latin Exam in the spring to benchmark their progress against national standards and diverse programs across the country. Students may take this course with departmental approval. **(Full year, 1 credit)**

Latin IV

This course provides a transitional reading experience for students who have completed the basic grammar program and wish to apply their skills to reading authentic Latin literature. Students engage in surveys of the love elegies of Catullus, Caesar's historical commentaries on his conquest of Gaul and the epic mythology of Vergil's "Aeneid" among other authors. Throughout this introduction to Latin literature, students review, remediate and practice various grammar skills to enhance their ability to translate, comprehend and

analyze each author's writing. In addition, students receive exposure to the meters used by Roman poets and the literary devices pertinent to the study of Latin literature. Accordingly, students explore thematic connections within each author's works and draw connections among the different authors and to the modern world. In general, the course continues to address the history and culture of the late Republican period and also addresses imperial Rome under the reign of Augustus Caesar. In the final quarter, students complete a final project that may include a further exploration of the works of Vergil and Caesar or an exploration of other authors, such as Cicero, Horace, Ovid, Martial, Pliny, or other authors of their interest. All students take the National Latin Exam in the spring to benchmark their progress against national standards and diverse programs across the country. (**Full year, 1 credit)**

Latin IV - Honors

This course provides a full reading experience for students who want to pursue a fourth year of Latin but are not entering the AP® class. Students begin by reading a prose work of Cicero or other comparable author while engaging in a complementary review of grammar skills. They then spend the majority of the year engaging in a more intensive survey of poetry of Ovid (or some comparable poet). Possible texts include the love poems of the "Amores," the mythological tales of the "Metamorphoses" and the seductive verses of the "Ars Amatoria," with attention to grammar, meters and literary devices. Accordingly, students explore thematic connections within each author's works and draw connections between the different authors and to the modern world. In general, the course continues to address the history and culture of the late Republican period and also addresses imperial Rome under the reign of Augustus Caesar. In the final quarter, students complete a final translation project that may include an exploration of the works of Vergil and Caesar. Students are expected to read works of increasing difficulty and lengths. The study of derivation and word origins remains a central emphasis. Students are expected to attend the Virginia Junior Classical League Latin Convention in the fall and take the National Latin Exam in the spring to benchmark their progress against national standards and diverse programs across the country. **(Full year, 1 credit)**

Latin V

This course provides a full reading experience for students who want to pursue a fifth year of Latin but are not entering the AP® class. Students engage in an intensive survey of extant Latin poetry and prose, with attention to grammar, meters, literary devices and each author's style. In addition, students explore thematic connections within each author's works and draw connections among the different authors and to the modern world. In general, the course continues to address the history and culture of the late Republican period and also addresses imperial Rome under the reign of Augustus Caesar. In the final quarter, students complete a final translation project that may include an exploration of the works of Vergil,Caesar or some other author of interest to the student. All students take the National Latin Exam and attend the Classical Association of Virginia Latin Tournament

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in the spring to benchmark their progress against national standards and diverse programs across the country. **(Full year, 1 credit)**

AP Latin®

This course follows the syllabus of the AP® Latin course as outlined by the College Board. Students read and interpret the commentaries of Caesar and Vergil's "Aeneid" in the original language, paying particular attention to literal translation, literary devices, metrical features and themes concerning Roman identity and leadership. The course also addresses the political, social and cultural background of the late Republic and early Roman Empire, the historical era in which these authors composed their works. Most students enter this course after successful completion of the Latin III - Honors or Latin IV. In some cases, exceptional students from Latin III may also be considered for the course. Students are expected to read works of increasing difficulty and lengths. The study of derivation and word origins remains a central emphasis. Students are expected to attend the Virginia Junior Classical League Latin Convention in the fall and take the National Latin Exam in the spring to benchmark their progress against national standards and diverse programs across the country. **(Full year, 1 credit)**

Latin Collegiate Seminar: Post-AP®

This course offers advanced Latin students the opportunity to continue Latin translation and literary analysis after completing the AP® Latin course. Readings may cover the major poems of Catullus and Horace or a variety of readings from several genres and time periods. Additional readings from other authors may be selected based on time and the interest of students. Students are expected to read works of increasing difficulty and lengths. The study of derivation and word origins remains a central emphasis. Students are expected to attend the Virginia Junior Classical League Latin Convention in the fall and take the National Latin Exam in the spring to benchmark their progress against national standards and diverse programs across the country. Students may take this course with departmental approval. **(Full year, 1 credit)**

Possible Latin Sequencing Paths

Grade 9	Grade 10	Grade 11	Grade 12
Latin I	Latin II	Latin III	Latin IV
Latin I	Latin II - Honors	Latin III - Honors	AP Latin® or Latin IV
Latin II	Latin III	Latin IV	Latin V
Latin II - Honors	Latin III - Honors	AP Latin®	Latin Collegiate Seminar

Sequences may be fluid; depending on their relative level of proficiency, students may

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move from one row to another (as presented above) as they progress year-to-year in the department.

Greek

Ancient Greek I

This course is offered to students who have completed their language requirement in Latin, Spanish, or French, and who wish to begin Ancient Greek as an alternative to taking another level of the previous language, or in addition to advanced language study in another language. This course offers students who wish to pursue Classics in college a chance to place into a Greek II course as freshmen. This course covers the Greek alphabet, vocabulary, forms and principles of grammar, and presents selected topics on Greek culture. As time permits, students also explore Greek literature in translation. Completion of the language requirement in Latin, Spanish, or French is a prerequisite to this course, although exceptions may be made for students who apply. **(Full year, 1 credit)**

Ancient Greek II

This course offers a continuation of Ancient Greek I. For students who wish to continue Classics in college, this course reinforces and extends their knowledge of the Greek language, preparing them to take a Greek translation course as college freshmen. **(Full year, 1 credit)**

Possible Greek Sequencing Paths

Grade 9	**Grade 10**	**Grade 11**	**Grade 12**
Level II Latin, French or Spanish	Level III Latin, French or Spanish	Greek I	Greek II
Level I Latin, French or Spanish	Level II Latin, French or Spanish	Level III Latin, French or Spanish	Greek I

Electives

Etymology: Roots and Word Origins

This course offers a study of etymology, the origin of word roots in Latin and Greek, comparing them with those springing from Germanic, Anglo-Saxon and Danish origins. Students learn how the history of Europe and the by-products of conquest, all the way back to Ancient days, have affected our own language. The course is designed to afford students the opportunity to learn the meanings of the basic vocabulary roots that formed the languages of the Greeks and Romans, and to carry those roots into English. Through

a study of root synonyms and antonyms, verbs and nouns, students learn how English evolved and practice how to discern the meanings of unfamiliar vocabulary from the classical roots they can identify within the English words themselves. An added benefit to this course is its ability to serve as a valuable tool in preparing for the verbal section of the SAT. The course is open to all interested students, though preference is given to those who are about to sit for the SAT. This course does not have NCAA approval as a core course for potential Division I and II athletes. **(Semester, .50 credit)**

Greek and Roman History and Civilization

In this course, students learn the history of the Ancient Greeks and/or Romans, gaining further insight into the cultures and daily lives of these civilizations through the study of their literature in particular, and art where applicable. By learning the history of these important civilizations, students are also able to parlay this enhanced historical literacy into a greater cultural literacy, understanding the lessons of Ancient history and drawing parallels between the problems and triumphs faced by the Greeks and Romans with those encountered by our civilization today. The course is open to all interested students in grade 10 and above. No prior knowledge of Latin or Greek is required. This course does not have NCAA approval as a core course for potential Division I and II athletes. **(Semester, .50 credit)**

World Mythology

In this course, students survey the mythologies of many Ancient cultures, including Ancient Greece, Rome, Norway, Egypt, China, Japan, India, Africa and pre-Columbian America, with a focus on discerning the priorities and fears of the civilizations that produced them. By analyzing these myths, students will gain a greater cultural literacy and appreciation of the common archetypes that surface regardless of eras and geographies. Students will learn and compare myths addressing creation, floods, morality, heroes, death and the end of the world. The course is open to all students in grade 10 and above. No prior knowledge of Latin or Greek is required. **(Semester, .50 credit)**

English

English I - Investigating Forms and Genres

In this course, students use literature to explore communities and cultures different from their own while connecting their experiences to common themes throughout the texts. Through poetry, short stories, drama, essays and novels, students read and write their way to an empathetic view of the world. Students experience a variety of genres, voices and approaches to literature, including whole-class texts, literature circles and independent reading. They also engage in a variety of modes of written and spoken expression, including narrative, expository, persuasive and creative assignments. Throughout the year,

students also enhance their vocabularies, word attack skills and their understanding and application of grammar, usage and mechanics. **(Full year, 1 credit)**

English I - Honors: Investigating Forms and Genres

This rigorous advanced course encourages the process of critical thinking, analysis and writing through the study of fiction, nonfiction, drama and poetry. Students continue to expand their writing skills by studying vocabulary, grammar rules and stylistic conventions. The writing students do at the honors level is informed by a nuanced understanding of texts and the multiple perspectives that emerge from these texts. Students are expected to make connections within the literature to what they know and hope to know about themselves, their communities and the world, and outside the literature to other texts, studying how multiple authors treat similar themes and ideas. Further, through a Socratic method of teaching, students are trained to become confident in asking fundamental questions of any text: What does it mean? How can they apply its meaning to themselves and to their world? Students are expected to read daily, discuss readings passionately and write with conviction. Students may take this course with departmental approval. **(Full year, 1 credit)**

English II - Exploring Literary Perspectives

Students explore and participate in dialogues about the major philosophical questions that British and American literature have posed from their Anglo-Saxon origins to contemporary forms. Through a study of significant literary movements, students are expected to question the text and make meaningful connections between the texts and their contemporary world. Through close reading, creative and analytical writing, and collaboration, they gain a better understanding of these literary movements and philosophical questions, and begin to articulate their own relationship with contemporary literature. To strengthen their reading and writing skills, they continue to expand their knowledge of vocabulary, grammar rules and stylistic devices. **(Full year, 1 credit)**

English II - Honors: Exploring Literary Perspectives

In this rigorous advanced course, students are required to think critically and autonomously about literature, and to explore and participate in a dialogue about the major philosophical questions that British and American literature have posed from their Anglo-Saxon origins to contemporary forms. Students are expected to extend those philosophical questions and make meaningful connections to universal concepts and truths. Honors students are required to engage passionately in discussions as they draw their own conclusions. They are asked to deliberate about the effects of an author's choices and question the way in which an author creates meaning. Through close reading, analytical writing and collaboration, students continue to strengthen their reading and writing skills while expanding their knowledge of vocabulary, grammar rules and stylistic devices. Each student must also exhibit a higher degree of independence in completing the work that they were assigned, and should expect a more rigorous grading policy.

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Students may take this course with departmental approval. **(Full year, 1 credit)**

AP® English Language and Composition

This college-level course is offered to juniors and seniors, and teaches students to become skilled readers and writers who can identify rhetorical contexts and craft their writing to a variety of audiences and purposes. The course focuses on the study of how language is used to create meaning, and the analysis of both fiction and nonfiction prose. Students read from a variety of both primary and secondary sources, including print and visual texts, synthesizing material from multiple sources in their own compositions. Students are expected to adhere to the conventions of Standard English and to follow the citation guidelines of the Modern Language Association in all work. Students are expected to take an active role in class discussions. The pace and scope of assignments in this course is particularly intensive. Students may take this course with departmental approval. **(Full year, 1 credit)**

AP® English Literature and Composition

This course is offered to juniors and seniors who have demonstrated the ability to do college level work, and for whom English is a particular passion. This is a genre course, studying literature in English and a selection of important works in translation from the canon of world literature. Students frequently write literary analysis essays, including in-class AP®-style essays, in which they show a thorough understanding of the elements of fiction, poetry and drama. A formal research paper is also assigned. Short stories, a wide range of poetry, plays and novels are studied, along with regular preparation for the AP® exam. Students are expected to take an active role in class discussions. The pace and scope of assignments in this course is particularly intensive. Students may take this course with departmental approval. **(Full year, 1 credit)**

Junior/Senior Seminars

Banned Books

What does it mean when a country that cherishes the individual's freedom of expression regularly bans public access to works of literature? This seminar introduces students to the controversial issue of book banning and challenges them to think about why banning has happened and continues to happen. Students also have the opportunity to explore the history of book banning and examine the legal process by which a book is challenged and eventually banned from public libraries and schools. The novels we read represent diverse human experiences or struggles, including racism, mental illness and abusive relationships. Writing workshops for analysis and response essays accompanied by personal writing conferences help students prepare for undergraduate composition courses. **(Semester, .50 credit)**

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Gothic Literature

If you have ever seen a scary movie, been told a ghost story or read a Harry Potter novel, you have experienced a form of contemporary writing or filmmaking that has been influenced by Gothic literature. In this course, students learn about the origins of Gothic literature; they read, analyze and emulate a variety of texts with Gothic themes, including traditional novels such as Stoker's "Dracula," modern pulp fiction such as Lovecraft's "The Call of Cthulhu" and films such as Murnau's "Nosferatu." The goal of this course is to help students develop a deeper, more complex understanding of why the contemporary imagination is still so captivated with the supernatural, and how artistic interest in the supernatural is a result of cultural shifts after periods of psychological turmoil. **(Semester, .50 credit)**

The Harlem Renaissance

This course offers a comprehensive exploration of the African–American experience in the early 20th century. The course illuminates and embraces the vibrancy of the Harlem Renaissance and makes known the challenges experienced by members of the black race leading up to the movement and beyond. The course concentrates on the literature of the time, focusing on the fictional characters and the social injustices they endured, and also follows the historical events and people instrumental in this mass migration and philosophical awakening. **(Semester, .50 credit)**

Literature for the Inquiring Mind - Honors

An English class is a space to explore journeys of inquiry, discovery and connections. In this course, students are asked to take the helm of their literary adventures, each driving their own learning, while the teacher's role is to facilitate the learning process. At the beginning of each unit, students are presented with a question, problem or case study to explore, and are required to find and present the results of their explorations through various modes, including essays, presentations and vodcasts. For example, units may pose questions such as under what circumstances ought one not do one's duty, or is morality necessary for happiness? As the class evolves, students are given the opportunity to propose unit questions and inquiries. For each unit, students are provided with a recommended list of readings that cover multiple genres and periods and that address an aspect of the initial inquiry. Students are expected to research and read multiple texts with varying perspectives to help them arrive at a nuanced understanding of the inquiry, synthesizing information they gather to arrive at individual conclusions. Participants in the class are afforded independence to explore literature germane to their specific lines of inquiry, while whole-class discussions focus on universal questions that cut across individual studies. **(Semester, .50 credit)**

Literature of Social Change - Honors

The study of literature has always helped us to understand what it means to be human. Through the stories we tell, we learn to empathize with others, and sometimes those

stories are powerful enough to change society. Literature not only mirrors traditional social structures, which are sometimes characterized by social injustice, but it also illuminates possibilities for alternative social constructs. Reading literature from different historical periods helps students uncover the roots of social injustice and understand the legacies of those concepts. This rigorous advanced class explores the role of literature during major social movements and examines the legacies of those texts in contemporary discourse, covering such topics such as gender inequality, racism, economic exploitation, imperialism/postcolonialism and ethics.

Students explore the nature of injustice from an informed and critical perspective through a variety of texts, including novels, plays, poetry, short stories and essays, and through a variety of critical lenses. They are expected to identify the nuances in texts, analyze conflicting perspectives, and synthesize ideas and information to draw original conclusions. This is a reading and writing intensive course, and students are expected to complete assignments independently and to actively engage in class discussions with civility and depth. While students continue to develop close reading skills of written and visual texts and critical writing skills, which includes increasing vocabulary and understanding the conventions of Standard English, students in an honors-level seminar are expected to demonstrate effective control of language and stylistic fluency in their writing. **(Semester, .50 credit)**

Poetry

According to Frances Mayes, “Some pull of inner necessity draws the poet to the page, whether to explore a problem, pursue a rhythm, break apart logic, express an emotion, tell a story or simply to sing.” This course is for students who wish to study poetry not only as readers, but also as writers bent on exploring that inner necessity. Through a workshop format, students investigate poetry from different periods and cultures, develop and apply their understanding of meter and poetic form, hear poetry read aloud, perform poetry in a coffee house format, write analytically about poetry studied individually and in groups and create poems of their own through various workshop techniques. This course is designed to reinforce and improve upon the skills that students learned in previous English courses, including active reading, oral presentations, formal analytical writing and small group work. **(Semester, .50 credit)**

Reading and Writing Intensive: Nonfiction - Honors

To understand how an engine works, a mechanic must take it apart, examine its components and reassemble it. Learning to write well functions the same way. In this course, students will read, write and analyze different forms of creative nonfiction and journalism to better understand how personal essays and news features can inform, persuade and move readers—a skill set essential in crafting compelling communication of all types. Students will learn to read great works of creative nonfiction and journalism with a writer’s eye so that they can emulate and explicate these mentor texts. They will also

select a mentor author to research, analyze and present on. By the end of the course, they will have written various forms of creative nonfiction, journalistic articles, and craft analyses, culminating in a polished portfolio. Along with their reading and writing, they will continue to expand their vocabulary and develop a mastery of the conventions of Standard English. **(Semester, .50 credit)**

Redefining America

How do we continue to construct ourselves and evolve as a nation? Who is now part of that reconstruction process, either by invitation, invention or force? What new and different challenges face us as a nation? Anticipating the future, who and what will we become as a nation? What role does literature continue to play in the formation of an American identity, and is that identity new? These are a few of the salient questions that students will explore in this course. To do so, they trace America's ever-evolving literary tradition, from the end of the 19th century to the present day, covering periods of modern and contemporary American literature. The course explores a variety of genres, including short stories, poetry, drama, nonfiction, novels and film. Texts reveal a wide range of themes, voices and styles permeating the diverse world of American literature, allowing students to consider the historical, social and intellectual implications of being an American as well as to unpack the features of distinct literary movements. Students continue to develop critical reading, writing, revision, thinking and speaking skills through a range of assignments. **(Semester, .50 credit)**

Science and Literature

Students are introduced to works of imaginative literature (primarily short stories, science fiction, essays and autobiographies) on scientific topics and non-fictional works of science. Students consider how the intersections between literature and science raise fascinating questions in science, literature and ethics. They study vocabulary in the content area, and review grammar and research-writing skills. This course focuses on science fiction, environmental literature and literature and medicine. Science and Literature develops students' analytical and persuasive writing skills as they write about social and ethical dilemmas presented in fiction and non-fiction texts. **(Semester, .50 credit)**

Shakespeare - Honors

Is Shakespeare the greatest writer in the history of the English language? Why do audiences still flock to performances of his plays? What themes in his plays still resonate with us after 400 years? This course explores the world of William Shakespeare, arguably the most influential writer in Western literature, through a close study of several of his plays. Students read three to four plays representing Shakespeare's comedies, tragedies and histories. A typical semester might include "Hamlet," "Othello," "A Midsummer Night's Dream" and "Richard III." In addition to reading the plays, students perform selections from the works, write analytical essays and shorter responses, read excerpts from biographical and critical material on Shakespeare and view film adaptations of the plays. **(Semester,**

.50 credit)

Short Story

In this course, students read, discuss and dissect the works of great short story writers, such as Ernest Hemingway, Katherine Mansfield, Anton Chekhov and J.D. Salinger. They also read the short stories of slightly lesser known but equally innovative writers from diverse ethnic and geographical backgrounds. The goal of this course is to facilitate students' appreciation for the short story genre and a better understanding of the techniques used by different authors to captivate their audience, create a particular mood and portray reality (or the illusion of reality) within a confined literary space. In addition, this course is designed to help students improve their analytical reading and critical writing skills. Students focus on the following elements of short fiction: tone, point of view, setting, style, dialogue, characterization and motivation. **(Semester, .50 credit)**

Possible English Sequencing Paths

Grade 9	Grade 10	Grade 11	Grade 12
English I	English II	Junior/Senior Seminars	Junior/Senior Seminars
English I	English II or English II - Honors	Junior/Senior Seminars	AP® English Language or AP® English Literature
English I - Honors	English II - Honors	AP® English Language	AP® English Literature
English I - Honors	English II - Honors	AP® English Literature	AP® English Language
English I - Honors	English II - Honors	AP® English Language	Junior/Senior Seminars
English I - Honors	English II - Honors	AP® English Literature	Junior/Senior Seminars

Sequences may be fluid; depending on their relative level of proficiency, students may move from one row to another (as presented above) as they progress year-to-year in the department.

Electives for Non-English Credit

Writing Poetry and Short Fiction

This elective is for students in grades 10–12 who are serious about pursuing the art and craft of creative writing. In this course, the focus is on fiction and poetry. Students read examples of both literary forms, discuss the challenges of each form and then try their hand at a variety of creative pieces, including character sketches, monologues, dialogues, short stories, descriptive pieces and different types of poems. Students also read articles about writing by renowned literary figures and are expected to deliver presentations on one of these established writers. Students prepare a portfolio of selected and revised

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writings from the semester in lieu of a final exam. **(Semester, .50 credit)**

Fine Arts

Visual Arts - Studio Art

Introduction to Studio Art

This entry-level course in studio art prepares students for taking additional electives in studio art. This course introduces students to basic concepts and techniques of two and three-dimensional art and design, including color theory. The focus is primarily on two-dimensional design practices. Students learn how to look for and analyze elements and principles of design and learn about color theory. Students learn about the nature of working in three dimensions, collage and collaboration. The course offers an introduction to drawing, painting, mixed media, and photography. Students learn how to evaluate their own work and the work of others by participating in class critiques. **(Semester, .50 credit)**

Art I

This is an entry-level course for students interested in a more in-depth experience in art and is preparation for other advanced courses in Studio Art. This course includes some of the material covered in Introduction to Studio Art, specifically: the elements and principles of design. The core emphasis of Art I is to learn to see and draw from direct observation. This includes various approaches, styles, materials and skills for learning to see from life. Students learn about perspective, sighting and visual measuring and mapping, line variation, tone, value, still-life, room interiors and portraiture. In addition, students learn about color theory, light, abstraction, design and gain an introduction to 3-Dimensional thinking. Color theory is based on the Bauhaus School's *Interaction of Color*. As a required part of the course, students will keep an active sketchbook with weekly, graded assignments. Students learn how to evaluate their own work and the work of others by participating in class critiques. Field trips to major museums are required as part of this course. **(Full year, 1 credit)**

Art II

This course is required for students who plan to pursue Art III Honors and Portfolio Art Honors. Emphasizing the concept of *process*, students are exposed to a wide variety of media to explore drawing, painting, printmaking, bookmaking, time-based media and three-dimensional thinking/making strategies. Students continue to build on technical and observational skills they acquired in Art I. In painting, students work with watercolor, acrylic and oil-based paint mediums. In printmaking, students learn about linoleum reduction, mono-printing and drypoint, with oil and water-based materials. Students explore the nature of working in multiple/mixed media and learn a range of artist book making processes from zines to accordion fold books and the role of zines and artist books in our

popular culture. In sculpture, students begin to explore drawing in space and deconstruction of 2-dimensional works to create new 3-dimensional works. Students explore time-based art by creating stop-motion drawing animations. Students evaluate their own work and the work of others by participating in frequent class critiques. Students are expected to maintain a personal, graded sketchbook throughout the year. Field trips to major museums are required as part of this course. In addition, a brief survey of 19th 20th and 21st century art history is embedded into the curriculum to provide students cultural significance to the artworks they are creating. Art I is a prerequisite to this course, or permission of the instructor. **(Full year, 1 credit)**

Art III - Honors

The emphasis of this course is the advanced study of studio art and research and it is largely self-directed for 11th grade students. Students choose the theme and media they most want to pursue with the advice and guidance of the faculty. Throughout the course, students develop proficiency in the techniques, tools and compositional elements that develop the voice of the student in their chosen media and theme. Selected media may include drawing, painting, sculpture, collage, photography, artist books, sewing and more, or the course may mix media. The course emphasizes content and cultural awareness, and how content informs and forms work. Research is an integral part of this course and will be directed by both student and instructor, specifically as it pertains to their proposals and art history/contemporary art. Students are asked to investigate areas of historical and critical interest to their practice, and are expected to communicate a point of view, present ideas and discuss their own work in critical terms. Students continue work to develop their observational skills throughout the school year and continue to evaluate their own work and the work of others by participating in class critiques. Each student is expected to maintain a personal, graded sketchbook throughout the year. Field trips to major museums are required as part of this course. In addition, students will participate in Fall semester art school/college visits during the class period and every Art III student is required to attend National Portfolio Review Day in the Fall of the current academic year. Instructor will direct this process with students and parents. Art II is a prerequisite to this course, or permission of the instructor. **(Full year, 1 credit)**

Portfolio Exhibition - Honors

Students at this level, 12th grade, are considering a greater degree of individual involvement in visual art. The focus of this course is to create a personal portfolio of art. The goals for the portfolio may include cohesive works in a single medium and multimedia work within a single discipline or a project that conceptually combines ideas and skills from various disciplines. Students develop their own artist's integrity and refine their skills in order to present a culminating statement in their chosen discipline. Typically, the culminating statement connects the artist's personal work with the culture at large. Students investigate particular areas of historical or critical interest at greater length and according to their own needs and interests. Students at this level should be able to

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communicate a point of view, present ideas in a meaningful manner and discuss work in critical terms. All work leads toward the completion of a 10-20-piece body of work and formal exhibit. Field trips to major museums are required as part of this course. Art III - Honors is a prerequisite for this course. Students may take this course with departmental approval. **(Full year, 1 credit)**

Possible Studio Art Sequencing Path

Students may take more than one .50 credit course per year.

Grade 9	**Grade 10**	**Grade 11**	**Grade 12**
Art I	Art II	Art III - Honors	Portfolio Exhibition - Honors
Introduction to Studio Art	Art I	Art II	Art III - Honors

Visual Arts - Ceramics

Ceramics I

This course focuses on the fundamentals of working with clay. Students explore the properties of clay, glaze, kilns,firing and ceramic processes to develop a foundation in ceramic technique.. Ceramics 1 offers an overview of hand building methods, such as pinch, coil, slab and an introduction to the potter's wheel when time allows. Emphasis is placed on study and activation of the elements and principles of design in a 3D context through creation of both functional and sculptural works. Students participate in class demonstrations, discussions and critiques that explore various points of view about the history, theory and practice of creating ceramic art. Participation in Raku firing and Visual Art Show are class requirements. **(Semester, .50 credit)**

Ceramics II

This course builds upon the fundamental skills learned in Ceramics I, while introducing students to the intricacies of working with clay on the potter's wheel. Ceramics 2 students explore specific techniques in wheel throwing, glazing, kiln loading and firing procedures. Projects include repetitive throwing of cylinders, trimming,vases, pitchers and pulling handles for attachments. Through focused practice and repetition students gain confidence in creating functional wheel thrown pottery. Continued emphasis is placed on form and surface in a 3 Dimensional design context. Students are encouraged to foster the skills necessary to construct pieces with strength, integrity, craftsmanship and individual voice. Students participate in demonstrations, discussions and critiques that explore various points of view about the history, theory and practice of creating ceramic art. Participation in Raku firing and Visual Art Show are class requirements. Ceramics I is a

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prerequisite for this course. **(Semester, .50 credit)**

Ceramics III

This course builds upon the fundamental skills learned in Ceramics I and 2. Ceramics 3 offers an intermediate to advanced exploration of wheel thrown forms and processes. We begin with the study of a well formed bowl and culminate in the creation of the quintessential form in functional pottery; the teapot. Throughout the semester there is an increase in the ability for students to use the wheel as a tool to construct complex functional and sculptural pots as well as heightening their exploration of ceramic surfaces. Through research and practice, students gain increased awareness of the relationship between technique, craftsmanship, function and concept. They continue to develop a more critical eye when evaluating created work during class critiques. Critiques offer a venue to think critically about materials and process, explore various perspectives of the history, theory and practice of creating ceramic art; all while building good studio relationships. Participation in Raku firing and Visual Art Show are class requirements. Ceramics I and II are prerequisites for this course. **(Semester, .50 credit)**

Topics in Ceramics - Honors

This course offering is intended for students who have a passion for ceramics and are looking to further develop their knowledge of ceramic practices. Students are expected to be self-starters who work at a high level demonstrating their commitment to their craft as well as this studio. At this level of study the goal is to work towards mastery in specific areas of interest in ceramics. This course is one that may be repeated over a series of semesters as the student chooses to explore a myriad of advanced topics in their research with clay.

Each course is specifically designed to meet the needs of the individual and their areas of inquiry. Students will begin with some warm-up exercises while developing their proposal for intensive study. Upon approval of the project, the necessary demonstrations will be given for each individual to be able to begin their focused practice. The semester of research, practice and experimentation typically results in a small body of finished works to be exhibited in the spring Visual Art Show. Students will be asked to write an artist statement detailing their experience as makers in addition to exhibition of the created works.

In Topics in Ceramics Honors there exists an expectation that students will be active, positive role models in the studio. Cooperation with instructors and peers in all areas is essential as we seek a collaborative system of support for student endeavors and research. Students are asked to take on a higher level of responsibility and awareness of all studio procedures, working to assist in our community operations. This will enhance learning throughout other realms of a practice in clay. Participation in Raku and Visual Art

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Show are class requirements. Ceramics I, II and III are prerequisites for this course. **(Semester, .50 credit)**

AP® 3D Art and Design

Students create a portfolio of work to demonstrate inquiry through art and design and development of materials, processes and ideas over the course of a year. Portfolios include works of art and design, process documentation and written information about the work presented. In May, students submit portfolios for evaluation based on specific criteria, which include skillful synthesis of materials, processes and ideas and sustained investigation through practice, experimentation and revision, guided by questions. College Course Equivalent: AP 3-D Art and Design course is designed to be the equivalent of a one-semester, introductory college course in 3-D art and design respectively. Prerequisites: AP Art and Design courses are for all students who are interested in inquiry-based thinking and making. Although there is no prerequisite for AP Art and Design courses, prior experiences learning about and making art and design support student success in AP Art and Design. Students who have not had opportunities to take art or design classes prior to AP will likely need assistance in developing a foundational understanding of art and design materials, processes and ideas to prepare them for success. This content is directly quoted from the College Board website at APCentral.org. Participation in Raku and Visual Art Show are class requirements. **(Full year, 1 credit)**

Possible Ceramics Sequencing Paths

(Students may take more than one .50 credit course per year) Topics in Ceramics Honors and AP 3-D Art and Design are available to be taken more than once.

Grade 9	**Grade 10**	**Grade 11**	**Grade 12**
Ceramics I	Ceramics II	Ceramics III	AP 3-D Art and Design
Ceramics I	Ceramics II	Ceramics III	Topics in Ceramics - Honors
Ceramics I	Ceramics II/ Ceramics III	Topics in Ceramics - Honors Fall/Spring	AP 3-D Art and Design
Ceramics I/ Ceramics II	Ceramics III/Topics in Ceramics - Honors	AP Studio Art 3-Dimensional	AP 3-D Art and Design/ Portfolio

Sequences may be fluid; depending on their relative level of proficiency, students may move from one row to another (as presented above) as they progress year-to-year in the department.

Visual Arts - Digital Arts

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Digital Art I

This entry-level course is designed to prepare students to take additional electives in digital art (e.g.,photography, graphic design, etc.). This is an introductory course in using Adobe Creative Suite on the computer as an art-making medium. The course introduces students to digital software and techniques, image creation and manipulation, digital design and compositional methods, and the use of digital tools as a vehicle for creative problem-solving and personal creative expression. Students learn how to evaluate their own work and how to participate in the critical evaluation of others' work. **(Semester, .50 credit)**

Digital Art II

Digital Art II is for the student interested in in-depth exploration of design software. Projects will challenge students to grow technically and aesthetically, building on the skills acquired in Digital Art I. Students will explore digital media as a creative medium for contemporary artists. Students use their skills to solve visual problems, and build on their prior Adobe Creative Suite computer software knowledge and gain independence in their artistic projects. Digital Art I is a prerequisite for this course, or permission from the instructor. **(Semester, .50 credit)**

Graphic Design I

Graphic Design 1 is a course designed to teach students the basic pillars of visual communications: typography, composition, color, illustration and photography. Projects are designed to build a foundation of analytical and critical thinking skills and to strengthen student's creative confidence. Students are encouraged to find appropriate, clever and unique solutions to open ended problems through visual play. The curriculum for this course simulates work done by professionals and utilizes industry-standard software. By the end of this course students will be prepared to take on more advanced projects and design courses. Digital Art I and Digital Art II are prerequisites for this course. **(Full year, 1 credit)**

Graphic Design II

This course provides an extended study of graphic design principles and their application to more complex and comprehensive solutions. Experimentation, research, conceptual thinking and process are emphasized as students are given the opportunity to apply their knowledge to real-world design projects within the school. Students are expected to expand their proficiency in all aspects of the design process, including their use of a sketchbook for brainstorming and concept development, their understanding of typography, their technical skills in design software, critical thinking, collaboration and formal meetings and presentations with clients. Digital Art I and Digital Art II and Graphic Design 1 are prerequisites for this course. **(Full year, 1 credit)**

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Topics in New Media - Honors

This course is for students interested in pursuing a particular aspect of Digital Art beyond the level of courses provided. Students who are qualified for Advanced Photography, Advanced Graphic Design or Advanced Digital Imaging may qualify for this course. Students complete a series of thematic assignments and work together and independently to solve problems related to their particular focus area. Students also create a written proposal for a substantial self-directed final project. Research, critiques, formal presentations and creation of an artist statement are parts of this course. Permission from the instructor is a prerequisite for this course, which may also be repeated with instructor permission. **(Semester, .50 credit)**

Possible Digital Arts Sequencing Paths

Grade 9	**Grade 10**	**Grade 11**	**Grade 12**
Digital Art I	Digital Art II	Graphic Design I	Graphic Design II
Digital Art I/ Digital Art II	Graphic Design I	Graphic Design II	Portfolio Exhibition - Honors

Sequences may be fluid; depending on their relative level of proficiency, students may move from one row to another (as presented above) as they progress year-to-year in the department.

Visual Arts - Film and Video

Digital Video and Filmmaking

Digital technologies have reshaped the ways in which film and television programs are created, distributed and consumed. In this course, students take a critical and in-depth look at the methods and artistry of digital filmmaking in two complementary ways. Through analysis, students screen and deconstruct a wide range of film and television programs with the aim of analyzing the techniques with which these media communicate as art forms and as social and political products. Through production, students conceive, write, shoot, edit and present a series of their own digital film productions throughout the course of the term. **Digital Art I** is a prerequisite for this course. **(Semester, .50 credit)**

Visual Arts - Photography

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Digital Photography I

In this course, students complete a series of projects that strengthen their skills and technical understanding while pushing them to explore and experiment. Students learn the basic controls and settings of their digital single-lens reflex (DSLR) cameras and experiment with Adobe Photoshop as they refine their images. Students are introduced to studio and flash lighting, and begin to use a journal to study and record observations from the work of master photographers. Students are required to have their own DSLR camera, card reader and tripod. **Digital Art I** is a prerequisite for this course. **(Semester, .50 credit)**

Digital Photography II

This course builds on the skills and ideas learned in Digital Photography I. Work focuses on the production and high-quality output of still and moving imagery. The course serves as an introduction to creating and appreciating moving images for students with a still photography background. Through lectures, reading assignments and individual research presentations, students examine the relationship between still photography and moving images. Students also learn about how to extend the photograph through installation, projection, collage and montage, public art, collaboration, mixed media and other means. In-class demonstrations and tutorials are given on capturing of and editing both digital video and still photography. **(Semester, .50 credit)**

Advanced Topics in Photography

In this course, students develop a thematic body of work that can be used for an advanced placement portfolio, college admissions, scholarships and student exhibitions. As students move into this course, content is driven by the individual photographer's interest. Students submit proposals for their body of work and spend the semester creating work that is technically refined and more intellectually challenging. To this end, students are expected to work more independently and to develop a personal artistic direction or theme. All students write an artist statement and demonstrate exceptional commitment to creating art for this course. Permission from the instructor is a prerequisite for this course. **(Semester, .50 credit)**

Possible Photography Sequencing Path

Grade 9	**Grade 10**	**Grade 11**	**Grade 12**
Digital Art I	Digital Photography I	Digital Photography II/Advanced Topics in Photography	Portfolio Exhibition - Honors

Dance

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Introduction to Dance

Introduction to Dance is a course in which students will learn the beginning skills and fundamental basics of dance in a variety of styles including jazz, ballet, lyrical and modern. Students will improve flexibility, coordination, range of motion, musicality and poise. They will also develop greater self-confidence, self-expression and body awareness. Students will learn and develop techniques in the center and across the floor, as well as incorporate movement into larger dance combinations. Through creative movement improvisation, students will develop new movement vocabularies and tools to aid in creating original choreography. This course will also explore a brief introduction to the history of dance, highlighting famous and renowned men and women who have pioneered a new path in both the dance world and in our society as a whole. Students will learn how to describe, analyze and critique dance works. Public performance is required. **(Semester, .50 credit)**

Advanced Dance

Advanced Dance Arts is designed for the dancer who has had one or more years training in jazz, ballet, lyrical or modern dance and who seeks to continue developing technical and choreographic skills. Students will improve flexibility, coordination, range of motion, musicality and poise. They will also develop greater self-confidence, self-expression and body awareness. Students will learn and develop technique in the center and across the floor, as well as incorporate movement into larger dance combinations. This course will focus on jazz, ballet, lyrical and modern performance techniques and composition. Through creative movement improvisation, students will develop new movement vocabularies and tools to aid in creating original choreography. This course will also explore the history of dance, highlighting famous and renowned individuals who have pioneered a new path in both the dance world and in our society as a whole. Students will learn how to describe, analyze and critique dance works in the classroom and in live performances. Public performance is required. Introduction to Dance Arts or permission of the instructor are prerequisites for this course. **(Semester, .50 credit)**

Topics in Dance - Honors

This course provides in-depth and advanced instruction in a dance topic of the students' and the instructor's choosing. Students are required to present a thorough written proposal of their area of study along with a curricular statement by the instructor. An extensive background in dance is necessary for participation in this class. Students in this class are required to use their own workout clothes and dance shoes. The class culminates with a company performance. An audition is a prerequisite for this course. **(Full year, 1 credit)**

Possible Dance Sequencing Path

Grade 9	Grade 10	Grade 11	Grade 12

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Introduction to Dance	Advanced Dance	Advanced Dance	Advanced Dance/ Topics in Dance Honors

Music

Symphonic Band

Symphonic Band is the more traditional band option at the Upper School, and is open to any wind, brass, or percussion student who can perform their instrument at an intermediate to advanced proficiency. This ensemble focuses on the highest level of development of tone, technique and musical refinement in the band program, as students learn how to deploy advanced scale techniques, expand range, sharpen their hearing to increase personal and ensemble error detection, and perform music of a pre-collegiate difficulty. Students also have the opportunity to perform in smaller ad hoc chamber ensembles, and to participate in Virginia Band and Orchestra Director's Association sponsored events. Students in Symphonic Band should expect to perform music that is challenging, but fun and representative of a wide variety of musical styles, genres and cultural backgrounds. Students are expected to hold themselves to the highest standards in regards to part preparation and ensemble responsibility. There is no audition required for this ensemble, but the Director reserves the right to hear any student prior to registration for the class. **(Full year, 1 credit)**

Jazz Band

Jazz Band focuses on the introduction, development and performance of the numerous genres of jazz music. Students should have an intermediate to advanced ability on their selected instrument, be willing to learn and demonstrate the skill of improvisation, and should expect to engage in advanced scale techniques, expand range and sharpen the aural skills as it applies to the performance of their instrument. The Jazz Band has specific needs for instrumentation that differ from Symphonic Band, as we do encourage students who play guitar, bass and piano to consider joining. Any student joining on these instruments must be able to read music, both in chord symbols and in traditional music notation. Students in the Jazz Band will also have the opportunity to audition for Virginia Band and Orchestra Directors Association sponsored events. Students are expected to hold themselves to the highest standards in regards to part preparation and ensemble responsibility. There is no audition required for this ensemble, but the Director reserves the right to hear any student prior to registration for the class. **(Full year, 1 credit)**

Orchestra

Students are expected to perform a variety of string ensemble repertoires with expression and technical accuracy. This course emphasizes mastering skills in music theory, sight-reading and basic technical proficiency. Students are required to use their own

instruments and equipment for this course. The School has a number of instruments available for rental. Some after-school rehearsals, concerts, performances and competitions are required. Students may take this course with permission from the instructor. **(Full year, 1 credit)**

Percussion Ensemble

This is a year-long course designed to advance students' technique and understanding of percussion ensemble repertoire and playing. Students demonstrate proficiency on snare drum, mallets, timpani, drum set and all auxiliary instruments. Percussion Ensemble evaluation is based around students' participation, practice, professionalism and performance. Students learn to perform solo and ensemble repertoires with expression and technical accuracy. This course emphasizes skills in music theory, sight-reading and advanced technical proficiency. Participation in some after-school rehearsals, concerts, performances and competitions is required. Students may take this course with permission from the instructor. **(Full year, 1 credit)**

Concert Choir

This is a beginning to intermediate level course and is open to all students. Anyone interested in learning to sing is welcome to join this class. Students learn to sing with a free and open tone, understand and execute basic musicianship skills, and practice good rehearsal and performance etiquette. Participation in some after-school rehearsals, concerts and festivals is required. The music studied in the class is selected from a variety of sources, including standard choral literature and classical repertoires, as well as Broadway and Pop/Rock idioms. Students have numerous opportunities to perform here at Flint Hill, as well as additional opportunities to participate in larger ensembles such as District Honors Choir. All scheduled concerts and performances are an expectation of every choir member. **(Full year, 1 credit)**

Symphonic Choir

This is an intermediate to advanced level course and is designed for students who are serious about singing. Previous choral experience is a prerequisite for this class. The music performed and class setting require an advanced level of musicianship and vocal development. Participation in some after-school rehearsals, performances and festivals is required. The music studied in the class is selected from a variety of sources, including standard choral literature and classical repertoires, as well as Broadway and Pop/Rock idioms. Students have numerous opportunities to perform here at Flint Hill, as well as additional opportunities to participate in larger ensembles such as District Honors Choir. All scheduled concerts and performances are an expectation of every choir member. **(Full year, 1 credit)**

Music Theory

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Music Theory I

This entry-level course is open to students enrolled in a music ensemble. This course provides instruction in basic music theory, which is the academic aspect of the art of music. Students develop the skills necessary to understand and translate the language of music. The course includes study of basic music elements such as the staff, note names and values, rhythm, melodic reading and writing, and music terminology. The course progresses through the study of scales, chords, harmonic progressions, ear training, sight singing, form and analysis. Membership in a music ensemble (vocal or instrumental) is a prerequisite for this course. **(Fall Semester, .50 credit)**

Music Theory II

This is the second semester course to Music Theory I, used to dive deeper into the concepts explored in the first semester. Students that are interested in taking Music Theory II must either have completed Music Theory I or pass a placement exam administered by the instructor. Music Theory II will build on concepts of major and minor chord progressions, scales and melodies; major and minor sight singing; harmonic progressions; ear training; composition; and analysis. **(Spring semester, .50 credit)**

AP® Music Theory

This course introduces students to musicianship, theory, musical materials and theoretical procedures. The course is designed to provide students with the major components common to a first-year course in a college music program. The course integrates aspects of melody, harmony, texture, rhythm, musical analysis, elementary composition, history and style. Musicianship skills, such as dictation and other listening skills, sight-singing and keyboard harmony, are important parts of this course. All students prepare for the AP® Music Theory Exam administered by the College Board at the end of the year. Either Music Theory I or Music Theory II and permission from the instructor are prerequisites for this course. **(Full year, 1 credit)**

Possible Music Theory Sequencing Paths

(Students may take more than one credit course per year)

Grade 9	Grade 10	Grade 11	Grade 12
	Music Theory I*	Music Theory II	AP® Music Theory

**It is typical to begin the sequence in grade 10, since the prerequisite of membership in a music ensemble must be fulfilled in grade 9.*

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Theater

Introduction to Theater Through Improvisation

This foundational course is designed for students who love creativity, spontaneity and the thrill of performing without a safety net. Students learn the fundamentals of creative expression through improvisation: creating a character, developing relationships, advancing the story, justification, acceptance and freeing imagination and memory. This fun-filled improvisation course utilizes short-form, improvisation techniques. The semester culminates in a short performance for invited friends and family in the style of the hit show, 'Whose Line Is It Anyway?' (**Semester,.50 credit)**

Acting I

This course is for students who wish to develop and polish their performance techniques through intensive scene study, working with both classical and contemporary texts. Research and script analysis provide the platform with which to understand individual playwrights and the historical context in which they wrote, ranging from ancient Greece to present day Vocal work, movement for the actor, character development and staging techniques are all explored. This course does not have a prerequisite. **(Semester, .50 credit)**

Acting II

This course focuses on refining performance skills through detailed technique on the stage and theoretical research off of it. Students study and perform specially selected works with an emphasis on complexity, conflict and playing for truth. Learning to direct for the stage and scene writing is incorporated into the course. Acting I is a prerequisite to this course. **(Semester, .50 credit)**

Acting III

This course is offered to advanced theater students who want to continue the growth of their acting technique and understanding of theater through the research, analysis and scene study of preeminent playwrights of the 21st century. As with the preceding acting classes, the course looks at the social, economic and philosophical changes that have influenced the playwrights and their work. Students examine content, style and language to help the actors make choices in building a performance.Students are assessed on their research, script analysis and performance.. Introduction to Theater, Acting I and Acting II are prerequisites for this course. **(Semester, .50 credit)**

History and Social Sciences

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History

Contemporary World History I

A thematic study of the global revolutions of the 19th and 20th centuries. This 9th grade course develops students' understanding of the modern world. Through a combination of primary and secondary sources, students examine the major cultural, political, economic, social and intellectual trends that shaped and continue to influence Western thought and society. Specific themes include the roots of change, the role of leadership and the quest for rights. Learning activities and assessments develop students' ability to read for meaning, interpret primary sources, apply concepts, analyze events and ideas from multiple perspectives, write thesis-driven essays, support historical arguments and organize information for research.Students master analytical and interpretive communication skills as they develop a critical awareness of modern world history. **(Full year, 1 credit)**

Contemporary World History I - Honors

A thematic study of the global revolutions of the 19th and 20th centuries. This 9th grade course develops students' understanding of the modern world. Through a combination of primary and secondary sources, students examine the major cultural, political, economic, social and intellectual trends that shaped and continue to influence Western thought and society. Specific themes include the roots of change, the role of leadership and the quest for rights. Learning activities and assessments develop students' ability to read for meaning, interpret primary sources, apply concepts, analyze events and ideas from multiple perspectives, write thesis-driven essays, support historical arguments and organize, integrate and document information for research. Students refine their analytical and interpretive communication skills as they develop a critical awareness of modern world history. They engage in independent work with less scaffolding and must be capable of pulling main ideas from readings so that class time can be used to emphasize in-depth discussions of the content and critical thinking skills. **(Full year, 1 credit)**

Contemporary World History II

This 10th grade course is a follow-up course to Contemporary World History I. Students learn how current events are rooted in the conflicts and solutions of the past. Topics include current events from the Middle East, Asia, Europe, Africa and Latin America. Students leave this course as "citizens of the world" who are appreciative of cultural diversity and skilled in the interdisciplinary methods and concepts necessary for problem-solving and critical thinking in an ever-changing world. Organization, note-taking and analytical skills are stressed. Students use internet databases, periodicals, videos, maps and charts to work on group projects, conduct research on and write individual papers and communicate in a variety of formats. **(Full year, 1 credit)**

Contemporary World History II - Honors

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This 10th grade course is a follow-up course to Contemporary World History I. This course explores issues of contemporary significance to trace history backward in order to understand the root of any given event. The course proceeds by region and covers the Middle East, Asia, Africa, Latin America and Europe. This skills-based course focuses on news analysis, debate skills, public speaking, website and infographic building, historical fiction, digital timeline creation, oral history, and research skills and writing. The honors course has an increased reading load and nightly homework allocation. Culminating assessments are more in-depth with regard to content and detail. While all students present a research paper in conjunction with an oral history interview, students at the honors level are required to write a longer paper and produce a longer and more in-depth video. They are expected to already have strong writing skills and cover more content outside of the class. **(Full year, 1 credit)**

United States History

Responsible citizenship entails a firm understanding of the nation's past and its basic institutions. This 11th grade course is an in-depth survey of the major political, diplomatic, economic, cultural, social and intellectual trends in American life from the 15th through the 21st centuries. Major themes include the nature of leadership, the relationship between culture, economics and politics, the ways in which the benefits and responsibilities of society are distributed in different periods and among different groups, the development of foreign policy, the use and abuse of force and the blending of many cultures to create a great nation. Materials include music, videos, primary sources and a variety of internet resources. Organizational and note-taking skills are refined. Regular research opportunities present practice in historical scholarship. Written, oral, analytic and synthetic skills are honed. **(Full year, 1 credit)**

AP® United States History

AP® United States History is a college-level course that parallels a college seminar and provides students the opportunity to earn college credit on the Advanced Placement examination. In this class, we will explore the foundations and development of the United States through a chronological look at the major themes, peoples, events, ideas and movements in American history. Much of the supplementary reading will consist of primary sources, and the ability to understand and analyze them is an integral component of the AP® course. Students will be exposed to several writing assignments. These writing activities will help each student develop their analytical writing at an advanced level. Contemporary World History I and II are prerequisites for the course. Alternatively, permission to enroll may be sought from the department chair. **(Full year, 1 credit)**

History - Electives

African Studies

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The objective of this course is to enhance the student's knowledge and appreciation of the complexities of our world. The course will begin with an investigation of Africa's geography. The instructor will choose a region and a time period to study. The course will help students become global citizens in our interrelated world by developing critical reading, writing, inquiry and research skills.This course is open to students in the 11th and 12th grades. **(Semester, .50 credit)**

Practical Law and Mock Trial

This course is a one-semester elective designed to give students a look at civil and criminal law in the United States from a pragmatic, everyday life viewpoint. Students will learn about the American legal and judicial systems, their rights and responsibilities, and how the law functions with regard to everyday scenarios, such as traffic stops, malpractice lawsuits and arrest procedures. Students will analyze case studies, participate in simulations and hear from experts in the field. The class will culminate with a mock trial in which students will act as lawyers and witnesses arguing a case based on real-world events. This course is open to students in the 11th and 12th grades. **(Semester, .50 credit)**

Civil Rights, Human Rights and Civil Liberties

This course focuses on understanding how the Constitution works to guarantee specific rights to the citizens of the United States. Students take a close look at the United States Constitution and Bill of Rights to develop a greater understanding of the meaning and intent of these documents. Civil Rights and Civil Liberties are founding concepts of American democracy. But what are "civil rights" and how have they been both protected and violated in United States history? How have various movements in recent US history sought to define, enshrine and defend their rights in a constantly changing social and political environment? Rather than seeing these movements solely as directed by a few famous figures, this course centers around the contributions of everyday people who had a vision for a more just society and were willing to take the risks to achieve it. Students take a deep dive into the history of movements such as the American Indian Movement and the Long Freedom Struggle of African Americans as a starting point to better understand the constant current day struggle for the protection of civil liberties. This course centers a collaborative, seminar style, inquiry-based exploration that seeks a deeper understanding of the past and the opportunity to apply these lessons to the present and future. This course is open to students in the 11th and 12th grades. **(Semester, .50 credit)** *Offered 2022–2023*

Middle East Studies

The objective of this course is to enhance the student's knowledge and appreciation of the complexities of our world. The course begins with an investigation of Middle East geography, followed by an investigation of an overview of Middle East history. The course helps students become global citizens in our interrelated world by developing critical

reading, writing, inquiry and research skills. This course is open to students in the 11th and 12th grades. **(Semester, .50 credit)**

Russian Studies

The objective of this course is to enhance the student's knowledge and appreciation of the complexities of our world. The course begins with an investigation of Russia's geography. The instructor examines a region, literature and a time period to study. Russian Studies helps students become global citizens in our interrelated world by developing critical reading, writing, inquiry and research skills.This course is open to students in the 11th and 12th grades. **(Semester, .50 credit)**

Twentieth Century US History Told Through Popular Music

Twentieth Century United States History Told Through Popular Music examines and analyzes recent United States history through the popular music of the time. Genres include blues, rock, R&B, punk and hip-hop. How does music reflect and influence our views of gender, race and socioeconomic standing? How has popular music in the US influenced and reflected major cultural and political events? How have the ways people interact with music changed over time? Where is music going? A special focus is placed on the economics of the music business, and how the relationship between the artist and the fan has changed since the mid 1900s. This course is open to students in the 11th and 12th grades. **(Semester, .50 credit)**

Social Sciences

AP® Human Geography

AP® Human Geography presents high school students with the curricular equivalent of an introductory college-level course in human geography or cultural geography. Content is presented thematically rather than regionally, and is organized around the discipline's main subfields: economic geography, cultural geography, political geography and urban geography. The approach is spatial and problem-oriented. Case studies are drawn from all world regions, with an emphasis on understanding the world in which we live today. Historical information serves to enrich analysis of the impacts of phenomena, such as globalization; colonialism; and human–environment relationships, on places, regions, cultural landscapes and patterns of interaction. Students may take this course with departmental approval. **(Full year, 1 credit)**

AP® Macroeconomics

The purpose of any course in economics is to teach students how to calculate the benefits and costs of making tough choices with scarce resources. Macroeconomics uses tools to assess the behavior of the economy as a whole. Students learn about the world created when land, labor, capital and entrepreneurial activity become universally marketable. The

course covers the following topics: fundamental economic concepts, measurement of economic performance, national income and price determination, and international economics. Completion of United States History or departmental approval is a prerequisite for this course. This course is open to students in the 12th grade. **(Full year, 1 credit)**

AP® Microeconomics

The purpose of this course is to give students a thorough understanding of the principles of economics that apply to the functions of individual decision makers (both consumers and producers) within the economic system. The course places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and the role of the government in promoting greater efficiency and equity in the economy. Students may take this course with departmental approval. This course is open to students in the 11th and 12th grades with priority given to 12th graders and students that have completed pre-Calculus. **(Full year, 1 credit)**

AP® Psychology

This course follows the guidelines of the College Board by examining 14 different areas of the discipline of psychology. The class introduces students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. The topics covered in the class range from biological psychology and basic statistics to abnormal psychology and social psychology. Common themes throughout the course include a constant analysis of nature versus nurture, and a discussion of how different psychologists look at the mind and behavior. All students are expected to take the AP® Exam in May; throughout the year, students take tests that mimic the format of the exam. Completion of United States History or departmental approval is a prerequisite for this course. This course is open to students in the 12th grade. **(Full year, 1 credit)**

AP® United States Government

This course is focused on the nature of the American political system, its development over the past 200 years and how it works today. It examines the principal processes and institutions through which the political system functions as well as the policies that these institutions establish and how they are implemented. This course is designed to increase understanding of traditions, values and frameworks, and to grasp how these components work together. Students exercise higher-order thinking skills in their efforts to understand the full range of each issue and, therefore, become independent social critics capable of fulfilling their responsibilities as active and informed members of a democracy. The skills of critical analysis, visual data representation, thesis-driven writing and public speaking are all emphasized. Completion of United States History or departmental approval is a prerequisite for this course. This course is open to students in the 12th grade. **(Full year, 1 credit)**

Introduction to Economics

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This course consists of an overview of general economic reasoning skills, macro and micro topics and connections to current events. Students also explore topics in personal finance, such as goal setting, budgets, investing and taxes. This course is open to 10th to 12th grade students. **(Semester, .50 credit)** *Offered 2022–2023*

Possible History/Social Science Sequencing Paths

Grade 9	Grade 10	Grade 11	Grade 12
Contemporary World History I	Contemporary World History II	U.S. History	Senior Electives
Contemporary World History I - Honors	Contemporary World History II - Honors ***or*** AP® Human Geography	AP® U.S. History	AP® Social Sciences courses

Sequences may be fluid; depending on their relative level of proficiency, students may move from one row to another (as presented above) as they progress year-to-year in the department.

Innovation

Computer Science

Computer Science I

This course introduces the formal study of computer science and its role in the modern world. It provides students with the skills and knowledge to understand the technology they use daily, and to extrapolate this knowledge to understand and use emerging technologies. Computer science encompasses more than just programming: it builds the basic logical problem-solving skills and framework required for understanding an increasingly complex and technological world. The variety of activities and topics provides each student multiple opportunities to develop an appreciation for computer science. A major goal of this course is to provide students with general knowledge about computer hardware, software, languages and networks, and their impact in the modern world. This course does not have NCAA approval as a core course for potential Division I and II athletes. **(Semester, .50 credit)**

Cybersecurity: Shell Basics

Cybersecurity: Shell Basics focuses on harnessing the efficiency and power of the command line. Students will learn many of the most used commands, access configuration settings, and launch programs useful for cybersecurity on both the Linux

and Windows operating systems. Students will progress to writing their own Linux shell scripts and Windows Powershell scripts to accomplish complex tasks. **(Semester, .50 credit)**

Cybersecurity: Networks

Cybersecurity: Connected Devices focuses on networking devices together. Understanding how devices communicate together in a network is essential for anyone involved in cybersecurity. In this course, students learn how to set up and configure a secure network and attach devices. This includes Switching, Routing and Wireless configuration. Students will develop their networking skills within the context of the OSI model. **(Semester, .50 credit)**

AP® Computer Science A

This course introduces students to computer science through programming. Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design. Successful completion of Algebra 1, Computer Science 1 and/or permission of the department chair are prerequisites for this course. This course is not approved to meet the NCAA core course requirement for potential Division I and II athletes. **(Full year, 1 credit)**

AP® Computer Science Principles

This course introduces the foundations of modern computing. Students learn to create programming solutions and explore a broad range of topics including big data, digital privacy and security, and the societal impacts of computing. Students explore how computing innovations and computing systems—including the internet—work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. Completion of Algebra I is required. Unlike AP® Computer Science A, which is taught in Java, the AP® Computer Science Principles course does not have a designated programming language. Completion of Algebra I is required. **(Full year, 1 credit)**

Advanced Topics in Computer Science

Advanced Topics in Computer Science is a semester-long course for advanced programmers who are interested in applying their skills to a real-world project. At the beginning of the semester, students are presented with proposals for potential projects or may propose a project idea for group review and the approval of the instructor. These proposals center around solving a problem, automating a process, building a tool, and the entire class functions as a design and development company that will, as a group, develop a solution. The programming language and platform will be determined based on the

specific project. As the project will be different each semester, students may take this course more than once. At the end of the semester, students have an authentic project to add to their portfolio/resume, experience working as part of a development team, and experience designing a solution based on a client's needs. AP® Computer Science A is a prerequisite for this course. **(Semester, .50 credit)**

Robotics I

Robotics I is the first course in the robotics series. Students learn to build and program a robot. Students explore the fundamentals of robotics: Sense, Plan, Act. Students learn to use different types of sensors and program the robot to use the sensor data in conjunction with a manipulator. This engaging process implicitly provides a unique opportunity for students to place engineering design, scientific process, technological literacy and mathematics in a tangible context. **(Semester, .50 credit)**

Robotics II

This course is the second course in the robotics series. Students taking this course use current methods and processes of design as they learn to create custom parts. This engaging process implicitly provides a unique opportunity for students to place engineering design, scientific process, technological literacy and mathematics in a tangible context. Students begin by learning to use computer-aided design (CAD) software to design robot components. They then learn to use current technology to create parts for the robotics teams as well as for individual projects. Students have the opportunity to earn an industry-recognized CAD certification. **(Full year, 1 credit)**

Advanced Aerial Robotics - Honors

The robotics and computer science series of classes culminate with this class. Advanced Aerial Robotics is the third full-term course in the robotics and computer science series of classes. Students taking this course utilize current knowledge and methods of robotic design and programming as they learn to create a robot capable of competing in the Student Unmanned Aerial Systems Competition. The students learn to effectively use and program more advanced robotic components. Beginning with the release of the mission parameters, students design, build and program a robot capable of completing the mission parameters autonomously. Students work as a team to construct and refine the robot. Robotics 2 or AP® Computer Science is a prerequisite for this course, or students may take this course with the approval of the instructor. **(Full year, 1 credit)**

Physical Computing

Physical computing students explore computer science fundamentals and the design process while completing hands-on projects with microcontrollers. Lessons will include an exploration of various microcontrollers, their uses and programming platforms. From an

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automatic fish feeder, interactive light display, to cosplay-inspired wearable tech, final projects are driven by each student's interests and inspiration. **(Semester, .50 credit)**

Possible Computer Science and Robotics Sequencing Paths

Grade 9	Grade 10	Grade 11	Grade 12
Computer Science I ***or*** AP® Computer Science Principles (with prerequisites, permission from the department chair and academic advisors.)	AP® Computer Science A	Advanced Aerial Robotics or Advanced Topics in Computer Science	Advanced Aerial Robotics ***or*** Advanced Topics in Computer Science Advanced Topics in Computer Science ***or*** Advanced Aerial Robotics
	Computer Science I ***or*** AP® Computer Science Principles	AP® Computer Science A	Advanced Aerial Robotics ***or*** Advanced Topics in Computer Science Advanced Topics in Computer Science ***or*** Advanced Aerial Robotics
		Computer Science I ***or*** AP® Computer Science Principles	AP® Computer Science A
Robotics I	Robotics II	Advanced Aerial Robotics	Advanced Aerial Robotics
	Robotics I	Robotics II	Advanced Aerial Robotics
		Robotics II	Advanced Aerial Robotics

Sequences may be fluid; depending on their relative level of proficiency, students may move from one row to another (as presented above) as they progress year-to-year in the department.

Discovery of Engineering

Students explore 15–20 different engineering disciplines while reinforcing communication, independent thinking, collaboration and creativity within an engineering construct. Using group discussions, research, presentations, guest engineer interactions, and small and final projects, students become informed about the world of engineering. Advanced math or science are not required. Open to all grades. No prerequisites are required. **(Semester, .50 credit)**

Independent Study

The goal of this course is to provide students with a framework for pursuing individual academic interests and projects. Upon completion and approval of a project proposal, students will follow their course plan and meet every three weeks with the Academic Dean and/or a selected advisor who will provide guidance and feedback on progress.

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Students who are well-suited for the course should feel comfortable with self-directed learning (or hope to actively grow this skill), and should have a particular topic in mind or a project they have been working on outside of school for which they would like school time and support. Students interested in this course must submit a proposal explaining their topic or project of interest and the goals for the project. Students must also develop a pathway for their independent study that includes detailed planning for the duration of the semester. Applications are evaluated based on seriousness of purpose and adequate previous demonstration that students can succeed within a flexible learning environment. This course can be taken multiple times from the 9th to the 12th grades, if appropriate. **(Semester, .50 credit)**

Mathematics

Algebra I

Algebra I offers a comprehensive examination of algebraic concepts using a functions approach, extending students' knowledge and understanding of the real number system and its properties to the study of variables, expressions, equations and inequalities. Students build on their Pre-Algebra knowledge to develop a strong understanding of linear functions, inequalities, systems of equations and inequalities, exponents, radicals and polynomials and factoring. Emphasis is placed on understanding a variety of algebraic representations, and to making connections between algebraic concepts and their experiences in prior mathematics and science courses. This course is designed to introduce students to formal mathematical analysis, justification and communication. Students will utilize mathematical software and the TI Graphing utility, or an equivalent, to explore algebraic and graphical representations, make conjectures and analyze results. **(Full year, 1 credit)**

Geometry

This course provides an overview of the fundamental elements of Euclidean Geometry. Students investigate new topics while working through explorations and daily assignments both individually and collaboratively to develop the academic language of geometry and deepen critical thinking skills. Creative problem-solving, ingenuity and a solid foundation of Algebra I are critical skills for the course. Students develop ideas and experiences that lead to proficiency at writing formal geometric proofs. Students use the TI graphing utility or an equivalent, in addition to online programs to explore geometric applications. Topics in this course include constructions, the Pythagorean Theorem, angle relationships, triangle congruence, algebraic and geometric proofs, transformations, inductive and deductive reasoning, triangle centers, similarity, quadrilaterals and polygons, area, perimeter, volume and an intro into right triangle trigonometry. **(Full year, 1 credit)**

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Geometry - Honors

This course is a proof-based, hands-on investigation of two and three dimensional Euclidean Geometry. Students engage in lessons that focus on developing critical thinking, mathematical habits of mind and problem solving techniques pertaining to geometry. Students learn to develop conjectures through inductive and deductive reasoning, straightedge and compass constructions and explorations with Euclidean geometry postulates and definitions. Students use these experiences to work towards writing formal geometric proofs. Students master proof writing skills through algebraic properties, conditional statements, truth tables and laws of logic. Students learn to prove and apply theorems related to angles, segments, parallel and perpendicular lines, polygons, circles, congruence, similarity and transformations. Formal geometric proofs are reinforced through applying knowledge to coordinate geometry problems. Students learn about area, surface area, volume and right triangle trigonometry with relevant applications. Students will utilize the TI graphing utility, or an equivalent, to explore geometric applications. Honors Geometry students are expected to develop a deep understanding of the material and demonstrate the persistence necessary to solve unfamiliar and/or challenging problems. **(Full year, 1 credit)**

Algebra II

This course builds upon the fundamental concepts of variables, expressions, equations and graphs studied in Algebra I. This course spends more time reviewing Algebra I concepts to help sharpen their foundation as we move into Algebra II material. Students in this course will have mastery in some skills from Algebra I but need scaffolded instruction to access and find success on Algebra II concepts. The course covers properties of numbers, graphs, expressions, equations, inequalities and functions. Applications of mathematics to real-world problems, effective reasoning skills and problem-solving strategies are imperative to have success in this course. Students learn how to reason and problem solve conceptually and procedurally. Students will learn how to appropriately use TI graphing calculators as well as other applicable technology. Students will learn how to analyze their work and become self-sufficient in correcting their errors. Students are expected to have previously completed a full year of a Geometry course as a prerequisite. **(Full year, 1 credit)**

Accelerated Algebra II

This course builds upon the fundamental concepts of the variables, expressions, equations and graphs studied in first-year algebra. This course differs from Algebra II in that less class time is spent on reviewing Algebra I concepts. Students should have a solid mastery of Algebra I and desire the challenge of a faster-paced course. The course covers properties and applications of numbers, graphs, expressions, equations, inequalities and functions. Applications of mathematics to real-world problems, effective reasoning skills and problem-solving strategies are emphasized. The following skills and abilities are given high priority: making connections between the mathematical concepts studied and other

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subject areas, using mathematical language when modeling situations, effectively and efficiently using a graphing calculator and other applicable technology, and analyzing and avoiding common errors. **(Full year, 1 credit)**

Algebra II/Trigonometry - Honors

This course builds on the fundamental concepts studied in Algebra I. Multiple representations will be utilized to investigate linear, quadratic, polynomial, rational, logarithmic and exponential functions. In addition, students are given an additional foundation in the concepts and applications of right triangle trigonometry. In this course, there is an emphasis on applications of real-world situations. Students need to be able to make connections between the mathematical concepts studied and other subject areas and to use mathematical language when modeling situations. Students will learn more advanced and appropriate use of a TI graphing calculator, or equivalent graphing utility, to analyze and interpret the data of solutions. Students enrolled in this course expect to have more independence, be self-directed learners, and comfortable working with others. Students are expected to have previously completed full year Algebra I and Geometry courses, or their equivalent, is a prerequisite for this course. **(Full year, 1 credit)**

Functions, Trigonometry and Statistics

This course is designed to review and solidify the algebraic concepts learned in previous coursework while tying in some of the introductory Pre-Calculus concepts. The course enables students to display, describe, transform and interpret numerical information as data sets, graphs and equations. Linear, Quadratics, Polynomials, Rationals, Trigonometric Functions will be discussed from an algebraic, graphical and application perspective. This course emphasizes statistical concepts such as the selection of statistical displays, the difference between populations and sample statistics, statistical distributions and statistical inferences. Students will learn how to appropriately use TI graphing calculators. Students will learn how to analyze their work and become self-sufficient in correcting their errors. Students should have completed a full year Algebra II or equivalent course as a prerequisite. **(Full year, 1 credit)**

Pre-Calculus

This course builds upon the concepts and skills mastered in previous algebra classes and aims to facilitate a deep understanding of mathematics. This course is designed to prepare students for college-level work in mathematics, calculus courses, exploring in detail the concepts, technical skills and application. Polynomial, rational, exponential, trigonometric, logarithmic, inverse and piecewise functions are discussed from an algebraic, numerical, graphical and application from multiple representations. Students will learn more advanced and appropriate use of a TI graphing calculator, or equivalent graphing utility, to analyze and interpret the data of solutions. Students are expected to have previously completed a full year Algebra II course or its equivalent is a prerequisite for this course. **(Full year, 1 credit)**

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Pre-Calculus - Honors

This course is designed to prepare students for college-level content in AP® Calculus BC. Emphasis is placed on understanding a function from multiple representations, using limit notation to describe the behavior of a function and proofs of formulas and identities. Specific topics include functions and their inverses, trigonometry, polynomial and rational functions, exponential and logarithmic functions, polar coordinates, parametric equations, sequence and series and an introduction to limits and rate of change. Students will use technology and a TI graphing utility, or an equivalent, to explore algebraic and graphical representations. Successful completion of Algebra II-Trigonometry Honors/Accelerated Algebra II is a prerequisite for this course. **(Full year, 1 credit)**

Calculus

This course further builds upon the contents covered in Algebra II and Precalculus and covers differential and integral calculus. It is primarily concerned with developing students' understanding of the concepts behind calculus and providing experience with its methods and applications. Instead of serving as a first-year college course (as in the case of an AP® course), this course is intended to be an introduction to the subject that will familiarize college students with Calculus I. The content covers several types of functions, including how they can be used in modeling data, the concept of limits and how they apply to derivatives, various techniques of differentiation and integration, and ways in which differentiation and integration can be applied to real-world problems. For applicable topics, technology is used as a time-saving device to evaluate derivatives and as an aid in understanding the concepts of calculus graphically. Students are expected to have completed a full year of Precalculus or its equivalent in a satisfactory standing (ideally in the year prior). **(Full year, 1 credit)**

AP® Calculus AB

AP® Calculus AB is roughly equivalent to a first-semester college calculus course devoted to topics on differential and integral calculus. The course covers topics in areas such as concepts and skills of limits, derivatives, definite integrals and the fundamental theorem of calculus. The course develops students' mastery of the concepts of calculus with an emphasis on the connections and interrelationships between graphical, numerical, analytical and verbal representations of each problem and topic they encounter. Students primarily use the TI-83 and TI-84 graphing calculators to solve problems, experiment, interpret their results and support their conclusions. **(Full year, 1 credit)**

AP® Calculus BC

AP® Calculus BC is designed to cover all of the material that is included in most first- and second-semester university-level calculus courses. Students build on their Precalculus knowledge of families of functions, limits and rate of change, extending these concepts to differentiation and integration, as well as their applications. The specific content of the

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course follows the AP® curriculum and covers all topics from AP® Calculus AB, in addition to applying these concepts to vector and parametrically defined functions, polar functions, sequences, series and elementary differential equations. Advanced integration techniques and an introduction to numerical methods are also included. The course develops these concepts and problems through a variety of representations and requires students to make connections between and among them. Students learn how to use technology to help solve problems, explore and interpret results, and support mathematical conclusions. A focus is placed on clear communication of methods, reasoning and justifications. Successful completion of Precalculus Honors is a prerequisite for this course (or specific recommendation of the Department Chair). Note that given the overlap of topics with AP® Calculus AB, this course is not designed to be taken after AP® Calculus AB.
(Full year, 1 credit)

AP® Statistics

AP® Statistics introduces students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Four themes present in the content, skills, activities and assessments of the course are:

- Exploring data - observing patterns and departures from patterns
- Sampling and experimentation - what to measure and how to measure
- Probability and simulation - producing models using probability and simulations
- Statistical inference - data-based decision making and the likelihood of errors

Students use simulations, technology, investigations, problem-solving and writing as they build conceptual understanding. Students learn how to use technology to help solve problems, explore and interpret results and support statistical analyses. A focus is placed on clear communication of methods, reasoning and justifications. The content of the course follows the AP® curriculum and is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. A full-year Algebra II course or its equivalent is a prerequisite for this course. **(Full year, 1 credit)**

Multivariable Calculus: Post-AP®

This course builds on the concepts of single-variable calculus and applies those concepts to problems in higher dimensions. The course covers some topics already addressed in the AP® Calculus BC syllabus (but not in the AP® Calculus AB syllabus), such as parametric equations, polar coordinates and additional integration techniques. Three-dimensional work begins with vectors and the geometry of space. Vector functions are followed by the study of partial derivatives, multiple integrals and vector calculus. AP® Calculus BC is a prerequisite for this course. **(Full year, 1 credit)**

Linear Algebra: Post-AP®

This course includes matrix algebra, determinants, vector spaces, eigenvalues and

eigenvectors. Applications to engineering, computer science, mathematics, physics, biology, economics and statistics are included throughout the course. Students engage in chapter projects with real-world applications. AP® Calculus is a prerequisite for this course. **(Full year, 1 credit)**

Semester Electives

Financial Mathematics
Students investigate financial mathematics as applied to the stock market, modeling for a business, banking services and consumer credit, auto and home loans, investment plans for retirement and other applications. Developing on the functions learned in Algebra II, students will be able to apply models to real-world financial problems. Using the computer and the TI 83/84 finance applications, students work on problems that they will eventually encounter after high school. Algebra II is a prerequisite for this course. **(Semester, .50 credit)**

Probability and Statistics
This course introduces students to the theory and practice of basic probability and statistics, focusing on the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students simplify statistical calculations, develop probability concepts through simulation and interpret outputs and understand applications of data in decision-making. Topics covered in the course include analyzing univariate data, comparing bivariate data, collecting data via sampling, designing valid experiments, calculating probability, performing simulations using normal distributions, using regression analysis as a predictive tool and understanding statistical inferences. The course provides an excellent foundation for the college-level introductory statistics course. **(Semester, .50 credit)**

Possible Sequencing Paths
Click to view a graphic.

Modern Languages

French

French I
In this course, students develop the ability to communicate effectively across the four modes—speaking, listening, reading and writing—in French, and begin to build an

understanding of the cultures of Francophone countries throughout the world. During this course, students communicate in realistic contexts about topics that are meaningful and interesting. French is the dominant language of the classroom, and use of English gradually diminishes throughout the course of the year. Grammar is not taught in isolation; rather, it is integrated into the curriculum and linked to cultural exploration, vocabulary building exercises and communicative practice. **(Full year, 1 credit)**

French II

The course begins with a review of all the structures, verbs and vocabulary acquired during the first year of study, and subsequently builds on these structures to promote an accurate and precise means of communication in French. Much work is done to learn new vocabulary and verbs presented in thematic units as well as to acquire a mastery of the past tenses for narrative and descriptive purposes. The emphasis in the classroom is on putting the student in real-life situations that require appropriate response and interaction. Students learn to read and interpret French from a variety of audio, video, print and online sources, and express themselves in oral and written presentations. **(Full year, 1 credit)**

French II - Honors

This is an intermediate, accelerated course, conducted primarily in French, that begins with a rapid review of all structures, verbs and vocabulary acquired during the first year of study. It then quickly builds upon them through the four language skills: speaking, listening, reading and writing. The use of the past tenses is mastered, and additional verb tenses are introduced. Students enhance and develop their communicative ability with an emphasis on oral and written expression. They also learn to read and interpret French from a variety of audio, video, print and online sources. Students may take this course with departmental approval. **(Full year, 1 credit)**

French III

Students continue to develop their communicative ability in French across the four modes: speaking, listening, reading and writing, and increase their understanding of the cultures and literature of Francophone countries. During this course, students communicate in realistic contexts about topics that are meaningful and interesting. Thematic units reinforce previously learned vocabulary and language patterns before leading students to extend their knowledge to more complex grammatical skills. Students are encouraged to engage in classroom conversation to gain confidence and ability in the French language. This course is conducted primarily in French except when English is essential to avoid confusion on a grammatical or cultural point. Grammar is not taught in isolation; rather, it is integrated into the curriculum and linked to cultural exploration, vocabulary building exercises and communicative practice. **(Full year, 1 credit)**

French III - Honors

This is an intermediate, accelerated course, primarily conducted in French that begins with

a rapid review of all structures, verbs and vocabulary acquired in the previous two years. Students progress quickly by expanding on the interpretive, interpersonal and presentational skills in addition to expressing themselves more naturally and effectively with a high degree of proficiency. The course includes vocabulary-building in thematic contexts and a comprehensive survey of French verbs and grammatical structures necessary to build fluency. There is emphasis on writing to help students acquire the skills they need to perform in advanced classes. Oral communication, listening and reading activities are taken from a broad range of audio, video, print and online sources; and presentational writing is perfected through activities similar to those found in the AP® exam. Students may take this course with departmental approval. **(Full year, 1 credit)**

French IV

Conducted primarily in French, this course is designed for the student who wants to improve communication skills in French through culture and continues the exploration of language acquisition and broadens students' global awareness of the Francophone world. An intensive review and expansion of grammar, verbs, syntax and usage are presented. This helps stimulate short writing assignments on a regular basis as well as several longer essays during each semester. Students expand their reading and comprehension skills by exposure to and a discussion of a variety of print, video, audio and online authentic materials. Students continue to work on pronunciation, oral expression and language fluency in a variety of real-life contexts. **(Full year, 1 credit)**

AP® French Language and Culture

This course, which is taught entirely in French, concentrates on integrating and perfecting the four language skills: speaking, listening, reading and writing—to prepare students for the AP® exam. Students use French for active communication as they study a broad range of topics and contemporary global issues that relate to six overarching themes established by the College Board. Students develop the ability to understand spoken French in various contexts; cultivate a broad vocabulary based on reading newspaper and magazine articles, literary texts and other non-technical writings; and enhance their ability to express themselves coherently and resourcefully with reasonable fluency and accuracy in both written and spoken French using different strategies for different audiences. Cultural awareness of Francophone countries leads students to reflect on and interact with the perspectives and experiences of others. Students may take this course with departmental approval. **(Full year, 1 credit)**

French V: Business French

This advanced level (beyond Level IIIH or AP® language)French course is designed for students who seek to develop vocabulary and cultural knowledge, and who wish to improve their language skills in order to conduct business in French or travel through French-speaking countries with greater command of the language. Students engage in specific tasks based on authentic experiences in the business or professional world to advance their communicative

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and linguistic competencies, and to engage with other cultures. Students learn how to resolve problems, prepare for job interviews" since they make resumes, cover letters and practice interview skills, make decisions and engage in communicative activities that encourage lively class discussions. The course, which is conducted entirely in French, is designed to introduce students to the essential vocabulary and style specific to business French, acquaint them with the basic workings of the French economy and everyday business terms, present them with an overview of the infrastructure of the French economy and familiarize them with standard business correspondence. This course does not have NCAA approval as a core course for potential Division I and II athletes. **(Semester, .50 credit)**

French V: French Culture Through Film and Current Events

This course, which is taught entirely in French, aims to promote an understanding of Francophone culture and what it means to be an engaged world citizen through a variety of source materials: poetry and short works of fiction, films and the media (including Radio France Internationale) and online newspapers. Classic French films provide a springboard for studying major themes and establishing them in social, political and cultural contexts. Students gain insights and make comparisons between literary and film genres in addition to thinking critically about themes from different perspectives. At the same time, students have the opportunity to enhance their reading, writing, listening and speaking skills as they engage in discussions, read and watch selected materials, write analytical responses and create presentations on aspects of the coursework. **(Semester, .50 credit)**

Possible French Sequencing Paths

Grade 9	Grade 10	Grade 11	Grade 12
French I	French II	French III	French IV
French I	French II - Honors	French III - Honors	AP® French
French II	French III	French IV	AP® French or French V electives
French II - Honors	French III Honors	AP® French	French V electives

Sequences may be fluid; depending on their relative level of proficiency, students may move from one row to another (as presented above) as they progress year-to-year in the department.

Spanish

Spanish I

This course is an introduction to the Spanish language and Hispanic cultures, and it

emphasizes the five Cs: communication, cultures, connections, comparisons and communities. A communicative approach is used, with Spanish being the predominant language in the classroom and use of English gradually diminishes throughout the course of the year. Students communicate in realistic contexts about topics that are meaningful and interesting. Grammar is not taught in isolation; rather, it is integrated into the curriculum and linked to cultural exploration, vocabulary building exercises and communicative practice. Students converse with each other and express their own ideas in appropriate writing and presentational activities. They learn to interpret material presented from a variety of sources, including audio, video and print. Learning about Spanish–speaking cultures is an integral part of the language-learning process, and students compare cultural customs and behaviors with their own culture. **(Full year, 1 credit)**

Spanish II

Students review and build on basic grammatical, reading, conversational and writing skills acquired in Spanish I. They extend their knowledge of vocabulary, tenses and linguistic structures to expand their interpersonal, interpretive and presentational skills. This focus stimulates real-life situations that encourage interaction through use of the target language for a variety of tasks of increasing complexity. Students are expected to be able to transmit and receive information in Spanish with an emphasis on expressing oneself confidently orally and in writing. Learning about Spanish-speaking culture is an integral part of the language-learning process, and students compare cultural customs and behaviors with their own culture. **(Full year, 1 credit)**

Spanish II - Honors

This course is an intermediate and accelerated course for students who have demonstrated superior ability in the first year of Spanish. Building upon the fundamental skills developed during the first year, this course emphasizes and further refines the four language skills—speaking, listening, reading and writing—in a communicative approach to language learning. We focus on putting students in real-life situations that require some communication and response. Students are expected to be able to transmit and receive information in Spanish both orally and in writing, and to expand their vocabulary through reading texts from a variety of print and online sources. The course exposes students to all tenses and linguistic structures that are covered in regular Level II and III courses. Students may take this course with departmental approval. **(Full year, 1 credit)**

Spanish III

This course includes a complete review and presentation of verb forms, tenses and moods. The course is designed to clarify difficulties in the use of Spanish with respect to the preterit and the imperfect; the indicative mood and the subjunctive mood; tense sequencing; and differences of meaning between ser and estar, por and para and other grammatical structures. Class time is used for interaction in the target language to

strengthen spontaneous basic interpersonal communication skills and to practice appropriate grammatical structures and vocabulary. Students learn about various cultural topics from the Spanish speaking countries, making connections and comparisons to their culture and others. Compositions are also assigned to reinforce the material learned and to allow students to express in Spanish creatively. Students also prepare reports on assigned topics and deliver them orally to stimulate discussion and exchange ideas. The course also encourages an exploration of and comparison with cultures of Spanish-speaking countries. **(Full year, 1 credit)**

Spanish III - Honors

This accelerated course covers the Spanish III curriculum and grammar topics from Spanish IV. This course includes a comprehensive review of verb forms, tenses and moods. In addition, the emphasis is on internalizing the problematic uses and other fine points of Spanish grammar and syntax to communicate with proficiency on several topics of interest. Oral communication, listening and reading activities from a broad range of print, online sources and writings are perfected through activities similar to those found in the AP® exam. Students learn about various cultural topics from the Spanish speaking countries, making connections and comparisons to their culture and others.This pre-AP® course provides students who excel with the option to enroll in the AP® Spanish Language and Culture course in the following year. Students may take this course with departmental approval. **(Full year, 1 credit)**

Spanish IV

This course is designed for the student who wants to improve communication skills in Spanish through culture. The emphasis of the class is on the communicative elements of the language, focusing on daily conversational skills and communication activities. Students review grammar as necessary to gain greater proficiency in their speaking skills and use a variety of readings and authentic resources on advanced-level themes to stimulate conversation and debate. Students express themselves in a variety of written communications and essays including completing blog entries. This course provides students with a solid foundation for studying abroad or travel experiences, and may also serve as a segue to language studies at the university level. Students are expected to make connections between their culture and Spanish speaking countries, with the broader goals of increased cultural understanding and fluency. **(Full year, 1 credit)**

Spanish IV - Honors

This course is designed to refine students' understanding of Spanish grammar and syntax while including readings on the culture, history and literature of Spain. Students are expected to be able to read and comprehend texts from authentic materials, such as magazines, newspapers and internet sites. Readings are followed by oral discussions in which students are encouraged to analyze the material and express their ideas and opinions on the subject, as well as making cultural connections between their culture and

others.. Students also give oral presentations and write essays. Additionally, they have the chance to practice AP®-style activities. Aside from speaking opportunities in class related to the readings about culture and history, the review of grammatical concepts is based on its application to daily conversational skills and specific communication activities. The literary component of this course involves the reading of major Spanish works such as a student version of “Don Quixote.” Students may take this course with departmental approval. **(Full year, 1 credit)**

AP® Spanish Language and Culture

This course concentrates on integrating and perfecting the four language skills—speaking, listening, reading and writing—to prepare students for the AP® exam. Students use Spanish for active communication as they study a broad range of topics and contemporary global issues that relate to six overarching themes established by the College Board. Students develop a broad vocabulary base and the ability to understand spoken Spanish in various contexts such as reading newspapers, magazine articles, literary texts and other non-technical writings. Students work to acquire the ability to express themselves coherently and resourcefully, with reasonable fluency and accuracy in both written and spoken Spanish, using appropriate strategies for different audiences. Cultural awareness of Spanish-speaking countries leads students to reflect on and interact with the perspectives and experiences of others. Students may take this course with departmental approval. **(Full year, 1 credit)**

Spanish V: Current Events

This course explores current issues in Latin American and Spanish societies. Through the study of newspaper/magazine articles, television news, documentary programs, films and literature, students become familiar with the artistic, political and social movements at the forefront of the Spanish-speaking world and their relationship to important historical events. The course is a discussion seminar and focuses on enhancing listening and speaking skills. Students lead discussions, give oral presentations throughout the semester, and complete an in-depth final project based on one of the literary figures, filmmakers, historic events or socio-political movements studied during the course of the semester. Students can take this course in conjunction with the film course or independently. This course does not have NCAA approval as a core course for potential Division I and II athletes. **(Semester, .50 credit)**

Spanish V: Latin American and Spanish Film

This semester course provides students with an introduction to Latin and Spanish cinema of the past 25 years, to analyze how films reflect Spanish and Latin American societies and how cinema responds to the ever-changing needs of those societies. The course furnishes students with an understanding of the historical, social and political contexts of the films studied, enhances students’ oral, writing and comprehension skills through discussion of films and their historical/societal contexts. It also introduces students to

landmark directors and salient cinematic characteristics of films from diverse cultures linked by a particular historical and linguistic heritage. Students give oral presentations throughout the semester culminating in an in-depth final project based on one of the directors or sociopolitical movements studied during the semester. Students can take this course in conjunction with the current events course or independently. This course does not have NCAA approval as a core course for potential Division I and II athletes. **(Semester, .50 credit)**

Possible Spanish Sequencing Paths

Grade 9	**Grade 10**	**Grade 11**	**Grade 12**
Spanish I	Spanish II	Spanish III	Spanish IV
Spanish I	Spanish II - Honors	Spanish III - Honors	Spanish IV - Honors or AP® Language
Spanish II	Spanish III	Spanish IV or Spanish IV - Honors	Spanish V Electives or AP® Language
Spanish II - Honors	Spanish III - Honors	Spanish IV - Honors or AP® Language	Spanish V Electives

Sequences may be fluid; depending on their relative level of proficiency, students may move from one row to another (as presented above) as they progress year-to-year in the department.

*The order of AP®-level courses and electives is flexible for students of Spanish heritage.

Science

Physics

Through class discussions and experiments, this laboratory-oriented course explores the physical laws of nature and the techniques of science. This course provides the basic background material and skills needed for later science courses, including laboratory measurements and procedures, as well as the development of mathematical and scientific models. Through inquiry-based instruction, students learn topics including kinematics, Newton's laws of motion, energy and momentum. Students develop analytical skills to think through problems and apply their knowledge to familiar and unfamiliar systems. Specific skills practiced in this course include detailed observation, hypothesis

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development, experimental design, organized data collection, data analysis, graphing and troubleshooting problems. (Full year, 1 credit)

Foundations of Chemistry

This course occurs in the Fall semester and is designed to give students a proficient background in basic chemical properties, reactions, and theories through classwork (lecture/discussions and demonstrations) and regular laboratory work. A main goal is to help students understand the applications of daily life and the world around them in addition to giving them a solid foundation for future chemistry courses regardless of which elective they choose. Topics will include practical laboratory skills, chemical bonding, reactions, and stoichiometry. (**Semester, 0.50 credit**)

Nuclear Chemistry

This course is designed to help students understand the applications of chemistry in their daily life, the world around them, and the larger scientific chemistry community. Nuclear chemistry is the sub-field of chemistry dealing with radioactivity, nuclear processes, and transformations in the nuclei of atoms, such as nuclear transmutation and nuclear properties. Advanced chemistry topics such as atomic theory, intermolecular forces, behavior of gasses, and thermodynamics will be explored through the lenses of nuclear reactions and reactors, radiomedicine, and astrochemistry as well as applications to chemical and biological problems. (**Semester, 0.50 credit**)

Environmental Chemistry

This course is designed to give students an in-depth look at how chemicals affect the environment, with an emphasis placed on chemical cycling, atmospheric patterns, and biological processes. A main goal is to help students understand the impact of chemicals in their communities and beyond. Topics are presented through real world data and studies which emphasize thermodynamics and intermolecular forces. Topics include studies on carbon cycling, contaminants, hazardous waste, sustainability, resource conservation, and basic chemical analysis. (**Semester, 0.50 credit**)

Physical Chemistry

This course is designed to help students understand the applications of chemistry in their daily life, the world around them, and the larger scientific community. Physical chemistry is the study of macroscopic and microscopic phenomena in chemical systems in terms of the principles, practices, and concepts of physics such as motion, energy, force, and time. Advanced chemistry topics such as atomic theory, thermodynamics, intermolecular forces, and the behavior of gasses are explored through the lenses of physical chemistry, light, electron structure, equilibrium, reaction kinetics, and electrochemistry. **(Semester, 0.50 credit)**

Biochemistry

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This course introduces students to biochemistry and the chemistry in living things, with an emphasis placed on the effect of molecular structures and chemical bonding on biological processes in living organisms. The evolution of natural product chemistry and synthesis will be taught through the lens of biochemistry. Topics include macromolecules, gene replication, DNA, protein synthesis, and specific biochemistry techniques. A main goal is to help students visualize the complex biochemical processes that dictate how living organisms survive and adapt. (**Semester, 0.50 credit**)

Advanced Biology - Anatomy and Physiology of Animals

This course explores the intricate and sophisticated relationship between the structure and functions of the human body at the organ, tissue, cell and subcellular levels, including a focus on human health and disease. Another main theme is comparing the human systems with those of other animal phyla and tying this in with evolutionary relationships. Negative and positive feedback systems, maintaining homeostasis, intracellular and extracellular environments, and energy sources are also discussed. Other topics include how the structures of biological molecules are related to their functions, how deoxyribonucleic acid (DNA) is packaged within a cell, and the role of DNA and RNA in making proteins. Projects and laboratory experiences (including dissection) reflect the topics studied throughout the course. Modeling Physics, Chemistry or department approval is a prerequisite for this course. (**Semester, .50 credit**)

Advanced Biology - Anatomy and Physiology of Plants

This course explores the wide diversity of structures and functions in the plant kingdom at the organ, tissue, cell and subcellular levels. The basic organs (roots, stems and leaves), tissues (dermal, vascular and ground), cell structures, and reproductive systems are covered, as is the importance of plants as the basis for energy production in the biosphere and their use for nutrition and medicine. Additional topics covered include: negative and positive feedback systems, maintaining homeostasis, intracellular and extracellular environments and energy sources, cell cycle and meiosis and their role in life cycles, as well as the functions, structures, and synthesis of the four biological molecules. Projects and laboratory experiences reflect the topics studied throughout the course. Modeling Physics, Chemistry or department approval is a prerequisite for this course. (**Semester, .50 credit**)

Advanced Biology - Cell Biology

This course investigates the structure and function of cells and their subcellular structures. Topics covered in this course include the chemistry of life, cell theory, prokaryotic and eukaryotic cells, structure and function of eukaryotic cellular organelles, structure and function of the plasma membrane, cell transport, bioenergetics, mitosis and meiosis. Students also explore the consequences of the breakdown of these processes, including cancer and other diseases that result from improper cell function. Modeling Physics, Chemistry or department approval is a prerequisite for this course. (**Semester, .50 credit**)

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Advanced Biology - Conservation Biology

This course focuses on protecting the biodiversity on Earth. The course introduces the processes that regulate biodiversity at a variety of scales, including populations, communities, ecosystems and global biodiversity. The growth of human populations and the specific impacts of agriculture, land use and energy are also discussed. This knowledge is then used to devise protection strategies for all levels of biological organization. Past climate changes and their impacts on biodiversity, including rates of evolution, origination and extinction are also discussed. Modeling Physics, Chemistry or department approval is a prerequisite for this course. (**Semester, .50 credit**)

Advanced Biology - Ecology

This course studies the complex interactions between organisms and their environment. The processes that govern the assembly of organisms at various scales will be discussed, including natural selection, resource availability, resource partitioning, competition, population growth and carrying capacity, community interactions, environmental variables and biodiversity partitioning. Modeling Physics, Chemistry or department approval is a prerequisite for this course. (**Semester, .50 credit**)

Advanced Biology - Evolutionary Biology

This course investigates how natural selection has acted throughout Earth's history to produce the wide variety of organisms that occupy the planet. This course focuses on microevolutionary mechanisms, such as mutations, genetic variation and natural selection, and how they have operated to produce macroevolutionary patterns, including the speciation and extinction of species within clades. Modeling Physics, Chemistry or department approval is a prerequisite for this course. (**Semester, .50 credit**)

Advanced Biology - Life's Origins and Transitions

This course explores the evolution of life on Earth, focusing on the physical and chemical properties that have constrained the structure and function of organisms and their parts. Major topics in evolution and Earth history will be explored, including natural selection, genetic variation, the origination and extinction of taxa, and the relationship between form, function and selection. These evolutionary topics are combined with concepts from physics and chemistry that are necessary for the initiation and maintenance of life, including the harnessing of energy and its conversion from abiotic to biotic forms, the structure of biomolecules and their assembly and storage, and the changes that the initiation of the biosphere made to the chemical compositions of the atmosphere and oceans. Modeling Physics, Chemistry or department approval is a prerequisite for this course. (**Semester, .50 credit**)

Advanced Biology - Modern Genetics

This course provides an overview of the principles of inheritance, including Mendelian

genetics and modern concepts of heredity. Topics covered include an overview of eukaryotic and prokaryotic cellular structure, binary fission, mitosis and meiosis, the structure and function of genomes, genes and chromosomes, genetic variation, Mendelian and non-Mendelian inheritance, tracking inheritance of diseases through family pedigrees, gene expression, consequences of gene mutation, feedback loops and homeostasis, and horizontal transmission of plasmids in prokaryotic cells. Modeling Physics, Chemistry or department approval is a prerequisite for this course. (**Semester, .50 credit**)

AP® Biology

This course is designed according to the guidelines set by the College Board, and strives to be the equivalent of a college introductory biology course usually taken by biology majors during their first year of college. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy, communication, genetics, information transfer, ecology and interactions. Whenever possible, topics under study are related to science in the news in order to demonstrate the practical importance of biology to society and the concept that biology is a constantly growing field. This course requires two class periods. Advanced Biology or AP® Chemistry are prerequisites for this class. Students may also take this course with departmental approval. (**Full year, 1 credit**)

AP® Chemistry

This course covers the equivalent of one year of introductory college chemistry, focusing on inorganic chemistry. Topics include the principles of chemical reactivity and the energy involved in chemical processes. The course requires that students be self-motivated, industrious, committed to learning challenging subject material, and communicative with teachers and peers. Class discussions and problem analysis are important aspects of the course. Students should be prepared to spend, on average, an hour a night on homework. This course requires two class periods. Chemistry or Chemistry Honors, and Accelerated Algebra II or Precalculus are prerequisites for this class. Students may also take this course with departmental approval. (**Full year, 1 credit**)

AP® Physics I: Algebra-Based

This course is designed to be a challenging college-level introductory physics experience; it is the equivalent of a first-semester college course in algebra-based physics. This project-oriented course covers kinematic motion in two dimensions, Newtonian mechanics, work, energy and power, and linear and angular momentum. No prerequisite physics course is needed to qualify for this course, but students must have either completed or be concurrently enrolled in Chemistry and Algebra II. Students should also have clearly demonstrated in previous science and math classes an ability to comprehend concepts quickly and to maintain a high level of achievement throughout the year with a strong work ethic. This course, unlike the other AP® sciences, does not require a separate AP® laboratory class component but instead includes all laboratory experiences within the

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regularly scheduled class times. Students enrolled in AP® Physics I are not required to take AP® Physics II. A separate AP® exam will be given at the end of each year-long course. Students may take this course with departmental approval. (**Full year, 1 credit**)

AP® Physics II: Algebra-Based

AP® Physics II is an algebra-based course that explores topics such as fluid statics and dynamics; thermodynamics with kinetic theory; pressure volume diagrams and probability; electrostatics; electrical circuits with capacitors; magnetic fields; electromagnetism; physical and geometric optics; and quantum, atomic and nuclear physics. It is the equivalent of a second semester of algebra-based introductory college-level physics. Therefore, a strong record of accomplishment in math is suggested. Because this college semester course is taught over the course of a high school year, there is time to foster deeper conceptual understanding through student-centered and inquiry-based instruction. Students have the time to master foundational physics principles inside of a regular class rotation (no separate laboratory period is required).

AP® Physics II is designed to be a second-year physics course and can therefore be taken after AP® Physics I or following a strong freshman physics experience, along with a recommendation from the physics teacher. Students may take this course with departmental approval. (**Full year, 1 credit**)

AP® Physics C

This course is designed to fit into the college sequence to serve as the physics foundation for students majoring in the physical sciences or engineering. The sequence runs parallel to or is followed by mathematics courses that include calculus. Methods of calculus are used in formulating physical principles and applying them to physical problems. The sequence is more intensive and analytical than in the case of the AP® Physics I course. Strong emphasis is placed on solving a variety of challenging problems, some requiring calculus, as well as continuing to develop a deep understanding of physics concepts. The course covers two major areas, namely mechanics and electricity and magnetism, with equal emphasis on both. This is equivalent to two semesters of engineering physics in most major colleges. Two separate AP® exams are associated with this course. One exam covers mechanics and the other covers electricity and magnetism. Students taking this course take both exams, but separate grades are reported for each. This course requires two class periods. Students may take this course with departmental approval. (**Full year, 1 credit**)

AP® Environmental Science

This course emphasizes how ecosystems and the biosphere have functioned sustainably for millennia, and the present impact of people and society on the environment. Students enrolled in this laboratory-based course participate in discussions, hands-on activities in the laboratory and field, field trips and research projects. The syllabus focuses on the

processes of science, the role of energy in all systems, interconnections between biotic and abiotic components of an ecosystem, the role of people in environmental change, and the impacts of society on the environment. The course integrates aspects of Earth science, Biology, Chemistry, Physics and social sciences. In addition to studying the environmental problems caused by humans, the potential solutions to them, and many of the success stories resulting from deliberate efforts to solve these problems are discussed. This course requires two class periods. It is preferable for each student to have previously taken Physics, Chemistry and Biology, but they are not prerequisites. Students may take this course with departmental approval. (**Full year, 1 credit**)

Electives

Atmospheric Science and Global Climate Change

This course introduces students to the Earth's atmosphere through physical and chemical processes and the development of climates worldwide. Weather, physical phenomena, thermodynamics, radiation, climate variability, and change will be examined. The course will provide students with technical and scientific backgrounds to analyze, critique, interpret, develop, and build complex models related to climate and climate change. Students will examine arguments through policies, policymakers, and perceived public opinion on climate and climate change.

(Semester, .5 credit)

Human Anatomy & Physiology

The human body is an amazing contraption with all of its parts wonderfully adapted for their jobs, and working together to keep you functioning at your best. Human Anatomy and Physiology studies the various human organ systems through powerpoint presentations, videos, projects, labs, and a mammal dissection, focusing on these three main themes:

1. Energetic Efficiency: How does an organ or a cell accomplish its task efficiently? How is its structure designed to fit its function?
2. Homeostasis: What is the dynamic process by which the body maintains a balanced internal environment?
3. Health: What can we do to keep our body functioning at its best and what has gone wrong when we get sick or otherwise injured?

(Semester, .5 credit)

Biotechnology Techniques and Application

This hands-on, laboratory-based course provides students the opportunity to develop basic and advanced laboratory and analytical skills used in the biotechnology field, with a specific emphasis on DNA and recombinant DNA technologies. Techniques addressed in this course include DNA extraction and analysis, restriction digestion and plasmid mapping, bacterial transformation, polymerase chain reaction (PCR), quantitative PCR,

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ELISA and Western blotting. Students learn how these techniques are used in agriculture, medicine, criminal investigations and more. An independent research project and poster presentation are assigned in lieu of a final examination. Chemistry is a prerequisite for this course. (**Semester, .50 credit**) *–2023*

Discovery of Engineering

In this research, partnership and project-based course, students are introduced to engineering disciplines while also being exposed to the required practical knowledge of each field, giving them the opportunity to gain authentic experience within each subspecialty. This course promotes and emphasizes independent thinking, teamwork, creativity and leadership. Students explore subspecialties of engineering, including modules such as the math–science relationship and other governing rules, the history and current state of engineering, examples of types of engineering projects, technology use and inclusion of guest speakers. Students work in small/large groups on reports and projects. All students are expected to make a formal presentation on one group project to the class to display their research and final products. Advanced math or science are not required. (**Semester, .50 credit**)

Earth and Environmental Sciences

This class exposes students to fundamental science principles related to Earth's structure, its physical features and natural processes, and the relationship between humans and the environment. Units of study include volcanoes and earthquakes, rocks and minerals, geologic time, natural disasters, paleontology, natural resources, and past climate changes and their relevance to current climate events. Special attention is given to current events that show Earth's processes are in a state of constant dynamic motion and change. Chemistry is a prerequisite for this course. (**Semester, .50 credit**)

Evolution of the Biosphere

This course focuses on the relationship between the Earth's biosphere and the physical and chemical processes that shape the world. The initiation and evolution of life through time is intricately linked to extraterrestrial (e.g., the delivery of major elements to Earth, the formation of the solar system, bolide impacts and extinction events), tectonic (the movement of continents across the surface of the Earth), biological (competition, reproduction, DNA and metabolism), and chemical (ocean chemistry and nutrient supply) processes. Therefore, the course involves the interplay of all the major disciplines, including physics, biology, chemistry, astronomy and Earth science. This course includes laboratory activities, modeling exercises and long-term scientific investigations wherein students assemble information learned throughout the year and obtained from outside sources. Projects are intended to mimic the experience of scientific discovery through the assimilation of multiple data sets. Chemistry is a prerequisite for this course. (**Semester, .50 credit**)

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Field Natural History and Ornithology

On weekly field trips to local parks from Delaware Bay to Shenandoah National Park, students investigate the local flora, fauna, geology and ecology. Insect watching, eating wild edibles, stream surveys, botany, frog surveys and searching for fossils are all interesting ways to learn about ecosystems. A major component of the course is ornithology (the study of birds). This course meets for a reduced number of class periods in order to accommodate time spent on field trips, allowing the class to visit ecosystems that cannot be visited in a class period. More field trips are offered than are required, making it possible for students to avoid major conflicts with other activities. These field trips may be after school or for a half-day or a full-day on weekends. Another important component of this course is working on the campus to make it a better wildlife habitat. This course can be taken in any of the four quarters or in multiple quarters. Each quarter offers different opportunities to experience nature based on the season. This course is open to any student from grades 9 to 12. (**Quarter, .25 credit**) *–2023*

Forensic Science

This course focuses on the collection and analysis of various types of crime scene evidence. Students incorporate basic forensics skills along with other scientific knowledge to review and solve case studies based on evidence gathered. The evidence is then evaluated for strengths and weaknesses based on the levels of experimental accuracy and precision. Types of evidence introduced in the course include fingerprints, blood typing and spatter patterns, DNA fingerprinting and sequencing, hair and fiber analyses, toxicology, manner of death, and forensic anthropology. Class presentations, laboratory work and case studies provide the basis of the course pedagogy. A summative crime scene analysis serves as a final assessment for the course. (**Semester, .50 credit**)

Marine Science

This course explores the relationship between marine ecosystems and physical and chemical oceanography, including units related to geology, ocean currents, ocean chemistry and the atmosphere. The course also introduces students to the fundamentals of marine biology. Topics include ecosystem dynamics, biological interactions, biogeochemical cycles, ocean stratification and circulation, and wave–shore interactions. For all topics, the interplay between natural phenomena and human activities is discussed. Finally, the course has a laboratory and field trip component and pursues interdisciplinary topics, including human cultural history. (**Semester, .50 credit**)

Scientific Research

This course allows students to pursue a scientific topic of interest in great depth. In the first semester, students collaborate to select a study question and design and carry out field research to attempt to find an answer. Several scientists also visit the class during the first semester to discuss their research to give firsthand accounts of how to design research

projects and how to analyze the data. In the optional second semester, each student may design and perform their own individual research on a topic of interest or join a research team in a local laboratory or university. This course is open to any student from grades 9 to 12. Successful completion of this unique course often opens doors for students who want to conduct research at their future college or university. (Semester .5 credit)

Possible Science Sequencing Paths

Grade 9	**Grade 10**	**Grade 11**	**Grade 12**
Physics	Chemistry*	Advanced Biology**	Any AP® course*** or Science Electives
Physics	Chemistry	Advanced Biology <u>and one of</u> ● AP® Chemistry ● AP® Physics 1, 2 or C ● AP® Environmental Science	Any AP® course or Science Electives
Physics	Chemistry	AP® Chemistry	Advanced Biology or AP® Biology
Physics	Chemistry	<u>One of</u> AP® Physics 1, 2 or C AP® Environmental Science	Advanced Biology

Sequences may be fluid; depending on their relative level of proficiency, students may move from one row to another (as presented above) as they progress year-to-year in the department.

***** Chemistry credit must be taken in a single year by completing Foundations of Chemistry in the Fall semester and one of the Chemistry core electives (Biochemistry, Environmental, Nuclear or Physical) in the Spring semester.

** Biology credit is completed by taking two Advanced Biology semester courses in a single year. Students must take one course from each of the following topic sets.

<u>**Topic Set 1**</u> **Cell and Organismal Biology**	<u>**Topic Set 2**</u> **Ecology and Evolution**
Anatomy and Physiology of Animals	Evolutionary Biology

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Anatomy and Physiology of Plants	Life's Origins and Transitions
Cell Biology	Ecology
Modern Genetics	Conservation Biology

*** All science electives are open to juniors and seniors.

**** Biological Research and Field Natural History and Ornithology I and II are available for students in any grade who wish to add an elective in addition to the required science course.

Other Courses

Human Development

This course is designed to provide a developmentally appropriate framework for factual content and behavioral strategies to help adolescents navigate the physical, social and emotional aspects of their lives. Students learn the importance of staying socially, emotionally and physically healthy. Students learn how to evaluate social situations, which include peer pressure, decision-making and understanding themselves and others in relationships. Students learn to identify mental health issues within themselves and others, and are able to apply what they have learned so they can seek help in situations regarding mental health. This course is required for all ninth grade students. **(Quarter, .25 credit)**

Athletic Program

At Flint Hill, our interscholastic athletic program is an essential part of our students' educational experience and exists to teach and emphasize the School's mission, core values and philosophy. Additionally, Flint Hill emphasizes the pivotal values that athletics promote such as sportsmanship, leadership on and off the field, commitment to one's team or activity, critical thinking during practice and competition, time management, self-discipline and enjoyment.

Athletic teams in the Upper School practice after school until approximately 5:45 p.m., five days per week (sometimes six, especially for varsity sports early in the season).

All students in the Upper School must participate in four seasons of activity throughout their four years in the upper school. A minimum of two of these seasons must be a Flint Hill physical activity such as team sports, conditioning or other noncompetitive activities. Activities that qualify as team sports (as a player or manager) are as follows:

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	Fall	Winter	Spring
Boys	Cross Country Golf Football Soccer Dance Team	Basketball Ice Hockey Swimming Climbing Team Indoor Track and Field	Baseball Lacrosse Tennis Track and Field
Girls	Cross Country Dance Team Field Hockey Golf Soccer Tennis Volleyball	Basketball Dance Team Ice Hockey Swimming Climbing Team Indoor Track and Field	Lacrosse Softball Track and Field

A Fitness and Conditioning Class is offered each season after school for an activity credit. It is not considered a team sport.

Theater

Flint Hill offers several extracurricular theater arts opportunities. The Upper School produces a full-length play in the fall and student-directed, one-act plays in the spring. The Middle School produces a full-length play in the winter.

A musical is produced each year in the spring, and alternates between a Middle School and Upper School production each year. All productions are staged in the 300-seat Olson Theater, on the Lower School Campus.

Student Activities

The Upper School's rigorous academic program is balanced by extracurricular opportunities that are as diverse as our students' interests and abilities. The following list (not comprehensive) is a selection of the many opportunities available to Upper School students. Please note that clubs change year to year based on student interests, and a particular club's inclusion on this list does not guarantee the club will run the next year. Conversely, any student can propose a new club or resurrect a previously discontinued club for approval by following a straightforward process.

Academic Organizations

Certamen
Classics students participate in team-based competitions against other schools answering tossup questions centered on Latin language, Greek mythology, and Roman history,

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culture and literature.

Chemistry Club
Students explore and foster a love of chemistry by hosting labs and chemistry demos, following new and exciting developments in chemistry and holding group discussions.

Classics Club
Students promote classics in the modern world through service, social and scholastic opportunities, including competing in a variety of academic competitions and participating in the Virginia and National Junior Classical League conventions.

Clay Club
Students create ceramic arts and sponsor the Empty Bowls service event.

Cybersecurity
Students collaborate in several engaging national competitions including CyberPatriot, CyberStart America and PicoCTF. The club also sponsors a Cybersecurity Speaker series connecting Flint Hill with professionals in the community. This organization provides students with an opportunity to compete in cyber security training through competitions.

Debate Club
This organization encourages students to communicate confidently and logically and assert themselves formally through the art of debate and rhetoric.

Girls Who Code
This club brings more awareness to women in STEM and helps create a community where girls are comfortable learning coding.

Major Minors
This student-led a cappella ensemble focuses on contemporary music. Membership is by audition and requires a commitment to scheduled rehearsals after school and on weekends.

Math Modeling Club
Students practice applying mathematics to real-world problems including through participation in a variety of state and national math competitions. The club also serves the School community by providing students assistance with math classes through peer-tutoring.

Model United Nations
Students engage in research, public speaking and debate in preparation for model United Nations conferences.

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Quiz Bowl
This organization provides students who have a love of learning and teamwork an opportunity to compete in a team-based game answering questions about all facets of the high-school curriculum.

Robotics
The Robotics Activity participates in the First Tech Challenge (FTC) competition. Through teamwork, students design, build, program and test their robots before competing against other teams from Virginia, DC and Maryland. All ability levels are encouraged to join and develop their skills.

The Rough Draft (Literary Magazine)
Students create and produce a Flint Hill's literary and arts magazine, curating submissions of student work.

Science Olympiad
This club represents Flint Hill in Science Olympiad tournaments, including invitationals, regionals and, in qualifying years, states.

Spanish Club
This organization provides all students with opportunities to experience and learn more about the Spanish language and culture.

Theater Club
The club gives students the opportunity to participate in theater while also fostering confidence in their acting and communication skills generally.

The View (Student Newspaper)
The student-run newspaper publishes six times per year, with a staff consisting of writers, editors, and photographers and videographers.

Writing Center
Students provide peer- review editing.

Iditarod (Yearbook)
Students support the yearbook staff and provide photographic and editorial coverage of the School's events.

Affinity Organizations

Asian Student Union
This organization provides students with an affiliation with or appreciation of East Asia, South Asia and the Middle East opportunities to come together in the community, discuss current issues, engage in cultural events and foster cultural awareness.

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Black Student Union
This organization provides opportunities for students of color to come together in the community, discuss current events and educational opportunities, and foster cultural awareness.

FOCUS
This organization provides students the opportunity to explore the claims of the Bible, discuss life's big questions and deepen their personal faith through Christian fellowship.

Muslim Student Association
This organization provides students with an affiliation with the Muslim community to come together in the community, engage in cultural events and foster cultural awareness.

Gender & Sexuality Alliance (GSA)
This organization promotes the acceptance of and provides a supportive environment for LGBTQ youth and allies in a community of inclusion through the facilitation of conversations and LBGTQ-positive School events.

South Asian Student Union
This organization gives a voice to the South Asian community in Flint Hill and uniquely represents the South Asian students so that the Flint Hill community can understand the unique heritage, history and perspectives of the community's South Asian students.

Young Activists
Students in this club hold meetings in a safe space to encourage uncomfortable and well-rounded social and political discussions. Also, the club seeks to educate the general student population on current events and political topics to help them become more informed citizens of the country and the world.

Service, Activism and Awareness Organizations

Best Buddies Promoter Chapter
Students coordinate with the National Best Buddies Organization to empower youth to become advocates for people with intellectual and developmental disabilities.

Breast Cancer Awareness
The purpose of this club is to spread awareness about breast cancer, educate people on the disease and its impact on people in our society.

Cards For Our Friends
The purpose of this club is to spread awareness about people with developmental

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disabilities and mental health needs by creating heartwarming paper cards.

Clay Club/Empty Bowls
Students create ceramic arts and sponsor the Empty Bowls service event.

Champions for Cerebral Palsy
This organization raises awareness and funds for the treatment of cerebral palsy.

Environmental Club
This advocacy group promotes active interest in environmental issues, influences School policy and organizes actions to support sustainability.

Junior Optimist Club (Service Club)
This organization provides service opportunities for students in the greater community. Students support Flint Hill all-school service events, including the “unity” dress days, Week of Thankful Giving, Giving Tree and the annual coat drive.

Huskies for the Homeless
This organization spreads awareness of those affected by homelessness and provides volunteer opportunities to students to support the Northern Virginia area’s growing homeless population directly.

Mental Health Alliance
This club raises awareness about mental health issues through student forums, podcasts and presentations that seek to provide resources to students and de-stigmatize conversations about mental health in general.

Music For a Cause - Service Music Club
The members of this club play music in local institutions such as nursing homes to provide cheer to the community.

NOVA Nourishment Club
The purpose of this club is to alleviate hunger in the Northern Virginia area through a variety of events, including food packing, creating signs to raise awareness and food drop-offs.

Paw Patrol
The club was created in order to help dogs either get adopted or to improve their comfort of living. Service opportunities may include supporting pet adoptions, animal shelter cleanups, dog walking, etc.

Reading is Fundamental
This club seeks to provide books and literary material to underserved youth in the

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community.

Special Interest Organizations

Anime Club
Students watch and enjoy various anime/publications.

Asian Food Club
Students share food, recipes and restaurants they enjoy with friends who share similar interests in various forms of Asian cuisine.

Astronomy Club
The purpose of the astronomy club is to provide a space for learning and discussion on all topics regarding astronomy, including the planets, the stars, the physical universe and space as a whole.

Bird Club
This organization provides opportunities to appreciate nature and enjoy the outdoors through birding and bird banding.

Book Club
The club creates a welcoming environment for students with a shared interest in reading and discussing books.

Car Club
This club allows students to share their interests with other car enthusiasts and support the local car community by participating in events such as Cars and Coffee and the Toy Drive for the National Children's Hospital.

Cheer Club
Students meet to share their interest in cheerleading.

Chess Club
This organization provides students with shared interest in the game opportunities to practice the strategy of chess.

Environmental Club
This organization educates the community on environmental issues while promoting conservation and care for the environment.

Equestrian Club
This club seeks to spread awareness of equestrian sports within the school community.

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Film Club
This club shares information and sponsors activities for people who are interested in movies and filmmaking.

Global Economics and Finance Club
This club tracks and discusses events in financial markets related to global macroeconomics, monetary policy of central banks and other major market forces to better understand major movements in global financial markets.

Investment Club
This club teaches students knowledge in business with a focus on individual stock trades and analysis of companies and offers members an opportunity to participate in business competitions such as the Stock Market Game (a stock simulation competition).

Kpop Dance Club
Students who share an interest for kpop, both the music and the dance style, practice dance rehearsals, film cover videos and occasionally perform at community events outside of Flint Hill.

The Lifters Union
The purpose of this club is to inspire and support younger students who want to commence their fitness journey. This club will give them a group of older more experienced lifters to answer their questions and support their progress.

Medical Interest Association
This club exposes students to all of the different aspects of the professional medical field, bringing guest speakers to provide information and help interested students explore potential career options as a medical professional.

Music Appreciation Club
This club provides students a space to enjoy, learn about and experience new music with other people who share an appreciation and interest for music.

Open Mic
Representatives from the Student Council Association work with students to coordinate showcases of student talent.

Origami Club
Students learn about the ancient art of origami.

Photography Appreciation Club
This club provides a platform for photography enthusiasts to share their work with other

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students and the School.

Real Estate Club
The purpose of this club is to expand our knowledge on the world of Home and Garden Television. Members will examine different TV shows like “Flip or Flop,” “The Property Brothers,” as well as others and explore websites such as Zillow, Redfin, etc. for inspiration. Projects, including blueprint and room creation, give members a chance to merge their creativity with more technical skills.

Swiftie Club
Fans of award-winning entertainer Taylor Swift gather to share their appreciation of her music, videos and films.

Table Tennis Team (Ping Pong Club)
This club provides students an opportunity to play ping pong both for recreation and informal, intramural competition.

Translation Club
Members of this club perform service by translating online course subtitles to make educational content more accessible in the world as well as Flint Hill admission materials to help international families navigate the application process.

Yoga Club
This organization encourages healthy living, exercise, learning and mindfulness through the practice of yoga.

Student Governance and Leadership Organizations

Academic Honor Council
The self-nominated and peer/faculty-elected representatives of this organization are dedicated to maintaining and upholding the standards of the Honor Code within the student body.

Ambassadors
This self-nominated and faculty-selected student leadership group welcomes prospective students and families into our community at admission events and visits.

Athletic Advisory Council
This self-nominated and faculty-selected student leadership group prepares and plans School spirit events at athletic events, Homecoming, Winterfest and Springfest.

Conduct Council
This elected body of students and faculty make recommendations regarding

consequences for students that commit major disciplinary offenses.

Inclusive Leadership Council
This self-nominated and faculty-selected student leadership group supports the School's equity, diversity and inclusion initiatives and participates in student forums and presentations to educate the School community.

Peer Counselors
This self-nominated and faculty-selected student leadership group provides peer feedback and counseling to freshmen and upper-class students in conjunction with the Counseling Department.

Student Council Association (SCA)
In this elected leadership position, students become involved in the administrative and operational affairs of the School. The SCA is responsible for coordinating School events, including dances and upholding School traditions in partnership with the administration.

Student Support

Student Advisors

A student's advisor is their primary advocate, monitoring all aspects of a student's experience and progress. The advisor is the primary liaison between students and teachers, and between parents and the School.

Each student in the Upper School is assigned to an advisor for grade 9, and selects an advisor for grades 10-12 in May of each subsequent year. Advisory groups are typically no larger than 12 students and meet frequently throughout the year. These longer meetings allow advisors to provide social and emotional programming, discuss upcoming events or simply spend time learning more about the school experience of their advisees.

The Learning Center

In the Learning Center, learning specialists offer personalized academic support to students who learn differently. Learning support is available to students with documented learning differences that impede their academic progress.

Each student who receives direct support from the Learning Center is assigned to a learning specialist who serves as their academic coach. Students meet with their coaches on a regularly scheduled basis for one-to-one sessions, which take place during free

periods. In their sessions, academic coaches help each student set goals, outline action steps and create a plan to execute their action steps. Coaching sessions keep students on track and allow them to quickly address obstacles that interfere with their progress. While the focus of coaching is primarily academic, it weaves in other commitments the student may have such as athletics, fine arts and service learning. The learning specialists email updates on goals and action steps to students and parents once every quarter.

Study sessions are available to all students, whether or not they engage with academic coaching through the Learning Center. Students benefit from additional structure and academic support to help them complete action steps they have identified as critical to their academic progress.

College Counseling

College counseling is a comprehensive effort at Flint Hill. The College Counseling Office provides important support and guidance to families, while the academic and extracurricular programs of the School build the foundation students need to succeed, continue to grow and meet the demands of college life. Appropriately timed and developmentally designed, the college counseling program addresses student needs throughout the Upper School experience—most intensely during the junior and senior years.

Grade 9

Students begin building a strong academic foundation by developing effective study skills and good homework habits, and initiating relationships with faculty. Students should choose courses that reflect their interests and strengths, while balancing their ability to achieve their best and be challenged.If any academic deficiencies exist, families address them so that the student can continue to progress in each academic discipline.

Students should continue to develop existing extracurricular and personal interests and/or explore new opportunities, focusing on quality rather than quantity. While some believe there are “right” activities, what is most important to colleges is not what a student does; rather, what’s important is that a student invests in the community—school and beyond—and to what degree.

Grade 9 Student Programming
Human Development Class Drop-in: The college counselors will spend a class period with each Human Development class. This session is meant to be a discussion to allow students to ask questions about things they are curious about while also providing an overview of Flint Hill’s academic structure and how it works to prepare students to both apply to college and be successful once there. Students are encouraged to maximize their

academic opportunities and to invest outside the classroom during the school year and the summer. The college counselors review Flint Hill's graduation requirements, our class rank policy and the components of our transcript.

Grade 10

As they continue to build a strong academic foundation and begin to define deeper interests inside and outside the classroom, sophomores are introduced to the college search process through a series of well-timed programs throughout the school year. From preparing for and taking the PSAT in the fall and the PreACT in the spring to registering with SCOIR (our college counseling platform) to completing the YouScience interest and aptitude survey, sophomores learn more about themselves while beginning the initial preparation steps for applying to college.

Fall

Online Test Prep: Sophomores are provided time to create Khan Academy SAT Prep and ACT Academy Accounts to prepare for the PSAT and PreACT tests they will take. The online preparation supported by the College Board and ACT provide personalized and effective practice, tailored by the diagnostic exercises each provides.

The GPA (Grade Point Average) Game: In small groups, students learn about the various components that comprise a college application and their relative importance in the application review process. Through an interactive and fun exchange, students gain a more comprehensive understanding of the impact of each component in the decision-making process employed by college admission officers when they determine who to admit.

Winter

SCOIR registration: Students create accounts in SCOIR—the college counseling platform Flint Hill uses to help students manage the college search and application process. Easy to navigate and as engaging as social media platforms, SCOIR allows students to research colleges and experience a successful college search.

YouScience: Sophomores complete the YouScience interest and aptitude survey in SCOIR. The interactive results allow students to gain insight into their personal and intellectual strengths and investigate possible career options.

Spring

Junior Year Course Selection Seminars: The college counselors provide guidance regarding junior year classes with respect to the expectations and requirements of colleges and universities. This overview provides students with advice regarding the overall composition of their course load as well as the value of specific courses to colleges. (This seminar is recorded and shared with parents.)

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Preview of Junior Year: This peek into the junior year college counseling program provides sophomores with an overview of what to expect in the coming year and the opportunity to ask questions about the process.

Grade 11

Junior year is important in a student's Upper School experience. The developmental changes that typically occur between the grades 10 and 11 are significant and students often become more focused, mature and motivated. Juniors begin to see beyond Upper School and have more concrete ideas about what they want for themselves. However, everyone matures at a different rate, and while some juniors are very focused at the outset of the school year, some are not so until the end of the year or even the beginning of senior year. Despite these different rates of maturation, junior year is the correct time to introduce the specific aspects of the college search.

In addition to taking the PSAT in October, juniors participate in a series of junior seminars designed to introduce them to the college search and application process. These seminars run monthly from September through January with a session on the college admission essay in April. Admission lingo is decoded and students begin to identify their own priorities and needs.

Each November, the College Counseling Office sponsors the annual Junior Family College Night. This evening event, required for both students and parents/guardians, provides an overview of the current landscape of college admissions. The presentation provides insight into standardized testing, using SCOIR effectively and conducting the college search. The Flint Hill College Planner is distributed.

In the winter, families are assigned their college counselor;individual family conferences take place in February, March and April. This one-on-one meeting allows the counselor to begin to get to know the student's needs and goals, allows the family to ask questions, and provides an initial list of colleges for consideration. Senior year course selection and teacher recommendation requests are also discussed.

Juniors are invited to meet with their college counselor throughout the spring and participate in an individual check-in session before leaving for the summer. During this meeting, the college counselor will provide advice about using the summer to effectively manage the application process and answer questions.

Junior Seminar Series

September	Introduction to College Admissions

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October	Identifying Priorities and Defining Preferences
November	Researching Colleges, Part I
December	Researching Colleges, Part 2
January	Campus Visits and Interviews Building the College List
April	The College Essay: A Head Start

College Conference for Juniors: This school-day event brings admission officers to the campus to meet in small groups with juniors to discuss various aspects of the college search and application process. Topics include an application workshop, a mock admission session and tips for managing the application process itself. The day begins with a virtual panel discussion with senior admissions officers for parents and guardians.

Grade 12

In the senior year, the college counseling program becomes more individualized. Seniors are encouraged to visit their college counselor often to seek guidance and support during a busy and transformational year. While everyone is aware of the importance of junior year, many do not realize the role of the senior year in the college search and in a student's preparation for college-level work. Students are encouraged to choose classes that both challenge them—indicating to colleges their desire to push themselves academically—and prepare them for college-level work. It is essential, however, not to overload. The fall of senior year is likely the busiest term of high school as students are called upon to manage the application process while they are likely to carry more responsibility outside the classroom in leadership roles within activities and teams and outside of school.

Each summer, the College Counseling Office publishes a series of deadlines designed to provide the framework for a successful college search. Our "summer mailing" provides students with a calendar of deadlines by which different components of the college application process should be completed to ensure success. Each application submitted by Flint Hill students is reviewed by their college counselor. The student and counselor will meet to review the feedback on their application. The college counselors support students throughout the application process, providing feedback and advice. Each of Flint Hill's college counselors has worked as a college admissions officer prior to joining the Flint Hill community. This experience informs our college counseling program and the support and guidance we provide to families.

The College Counseling Office hosts online essay writing workshops each summer. These three-day sessions combine brainstorming and writing activities with important insight

gained from the counselors' professional experience as college admissions officers into how the essay is used in the application review process. Students will share their work with the college counselors and receive meaningful feedback.

The annual Senior/Parent College Night takes place early in the school year. A required event for each senior and a parent/guardian, this program provides a review of the process for submitting applications at Flint Hill along with insight into current trends in college admissions. The Flint Hill Senior College Planner, a comprehensive review of the necessary steps of a successful application process, is distributed.

Grade 12 Student Program

Husky Head Starts: Husky Head Starts are evening work sessions the week before school begins when the college counselors are available to seniors for help with their applications.

Senior Check-In Meeting: Each senior is required to meet with their college counselor in the first weeks of school to discuss their final college application list, determine the best application program strategy and map out a final application plan.

Senior Seminar Series

September	Stress & Time Management
December	Managing Decisions
March	College 101 - Roommates, Money Management and Academic Planning
April	Personal Safety & Responsibility in College

The goals for the college counseling program are to ensure that families feel confident in their approach to the college search and that students have good college choices. Flint Hill students have access to well-informed advice and support, creating confidence and inspiring a thoughtful approach to the next step in their education.

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