



2042-2023
**COURSE
OF
STUDY**
UPPER SCHOOL

FRIENDS SELECT

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Course Offerings 2020-2021

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Friends Select School Mission Statement

We believe in the Quaker values of respect for all, simplicity, the peaceful resolution of conflict, and a constant search for truth. In the words of George Fox, we seek to teach our students to "walk cheerfully over the world, answering that of God in everyone." We work to achieve balance between the needs of individuals and our community, in an atmosphere of cooperation and concern for the betterment of all. We value the rich diversity of our urban setting and the opportunities and challenges it provides for the education of our students.

The aim of education is preparation for the whole of life: the vigorous development of intellectual and physical capacities and those of the spirit. Our teaching is structured around these key beliefs--that both direct experience and the young person's developmental needs are central in the learning process, and that learning should be placed at the service of society. Under caring oversight, our students gain the knowledge, the skills, and the character that will enable them to live full lives.

Upper School Curriculum

The Upper School's college preparatory program is designed to prepare students for success in college and beyond. Our curriculum provides developmentally appropriate course sequencing and provides students the opportunity to explore interests and engage in passions. Students are able to challenge themselves by taking advanced level courses; students are able to engage deeply with an interest with independent studies or explorations; students are encouraged to develop their creativity with a wide variety of electives and arts courses. The school's commitment to community service, experiential outreach, and globalism, all grounded in Quaker principles, is embodied in the senior internship, community service, and exchange opportunities as well as in the curriculum.

Graduation Requirements

Each student in upper school must earn at least 24 total credits. Freshmen and sophomores must take a minimum of 6 credits each year. Juniors and Seniors must take a minimum of 5.5 credits each year. A student must obtain the approval of the Associate Director of Upper School in order to take more than six major courses. The Associate Director of Upper School will approve requests to take more than 6.5 credits only in special circumstances. Departmental graduation requirements are as follows:

<p>English - 4 credits Students are required to take four full years of English. This includes English 9, 10, 11 and two semester-long or one year-long Senior English Electives.</p> <p>International students whose first language is not English will be placed into ELL Support.</p>	<p>History - 3 credits History 9, 10 and 11 are required courses. The department also offers semester-long electives which are open to 10th, 11th and 12th graders, though priority is given to 12th graders.</p>
<p>Mathematics - 3 credits Students take at least three years of mathematics, and must complete one year beyond Algebra 2.</p>	<p>Science - 3 credits Physics (9th), Chemistry (10th) and Biology (11th) are required courses. The department also offers Advanced Level courses and a variety of electives.</p>
<p>World Languages - 2 credits At least two years, up through and including level three, is required. The department offers most levels in Mandarin, Latin and Spanish in addition to level 1 electives.</p>	<p>Religious Thought - 1 credit Ninth and tenth grade students take one semester of religious thought to fulfill this requirement.</p>
<p>The Arts - 2 credits Students may take courses in the visual arts, music, or drama.</p>	<p>Physical Education - 2 credits Students take one semester of PE/health per year, including CPR/First Aid certification. 11th and 12th grade athletes who play a sport in two seasons can be exempted from PE.</p>
<p>Additional Electives - 4 credits</p>	<p>Social Justice Week Participation in all grades</p>
<p>Senior Internship</p>	<p>Activity Requirement in all grades</p>

Graduation requirements for students entering upper school in grade 10 or later are established by the Director of Upper School. Waivers from graduation requirements may be made by the Director only for appropriate and clearly documented reasons.

Social Justice Week

Social Justice Week, the week between the first and second semesters, is a graduation requirement for all students every year they are enrolled. As such, students are expected to fully engage in all five days of activities in order to receive credit. Social Justice Week appears on a student's transcript and is assigned a "P" (pass) for students who are in attendance all five days, or who can produce a doctor's note for a short-term illness; or Social Justice Week is assigned a "W" (withdraw) if a student has one or more unexcused absences over the five days of InterSession.

Activities Requirement

Extracurricular activities provide opportunities for students to develop leadership, new skills, and talents while learning the value of teamwork and cooperation. Students in ninth and tenth grades are required to participate in at least one season of after-school athletics or one drama production (performance or stage & tech); they are also encouraged to participate in student organizations, which meet during the school day. Students in eleventh and twelfth grades are required to participate in at least one season of after-school athletics, in one drama production (performance or stage & tech), or in one of the following capacities: student government president, vice president, or class president; editor of the yearbook or *Cauldron*; peer tutor; manager of an athletic team (at the discretion of the athletic director and dean of students); Quizbowl team member (at least 5 tournaments/year, 2 practices/week and independent studying); or leader of a club that requires significant commitment (at the discretion of the club advisor and dean of students).

Summer Reading Requirement

Because Friends Select encourages students to develop into lifelong readers, a program of summer reading is required. In grades 9-12 students are asked to read from a selection from a list of teacher-offered books over the summer. In the fall, reflection on the summer reading is provided through ungraded discussion seminars scheduled during the school day, and in years when there is a common book that all upper school students read, the common book can be integrated into the curriculum in various ways.

Senior Internship/Independent Project

The Senior Internship/Independent/Service Project is a graduation requirement for seniors. At the conclusion of their regular courses and final exams in mid-May, seniors spend approximately three weeks in Philadelphia workplaces supervised by on-site adults (mentors) and an internship advisor from Friends Select School. The internship experience provides a useful complement to the often more abstract learning that takes place in an upper school classroom. One goal of the program is to familiarize students with the management of a business, the application of service, or the manufacturer of a product as well as cultural, artistic, and scientific research and application. This may be a time for students to explore potential career interests. Another goal of the program is for students to explore, build, and solidify their connections with Philadelphia, a vibrant city full of opportunities. During the internship, students acquire a greater appreciation for the useful and meaningful work available in the city. In some circumstances and with approval, some students complete internships outside of the city, state, and country. Throughout the internship process, students also begin to demonstrate an understanding of appropriate workplace behaviors. The goal of the internship or project is to facilitate the transition from the expectations of high school course work to those of college and adult life. The Senior Internships are evaluated in two distinct ways. First, seniors will receive a third-quarter letter grade, which is a cumulative evaluation, reflecting their participation in and meeting deadlines throughout the internship preparation process. Secondly, once the internship is underway, students and mentors are required to submit mid-internship check-ins and, when the internship is completed, all seniors give an oral presentation about their experience. If a senior has already completed a school-approved (or sponsored) project (during junior or senior year or the summer between junior and senior year), the student may undertake another internship or may complete a pre-approved, independent three-week project either on or off campus. The project may be academic or service-oriented. Although they may be working on an internship or project at an off-campus location, seniors are expected to attend regularly scheduled end-of-year events such as the athletic awards, yearbook ceremony, baccalaureate, graduation rehearsal and graduation. For academic or other reasons, as determined by the director of upper school, a student may be directed to fulfill this requirement by an alternative assignment. Any internship outside of the Philadelphia region must be approved by the US director.

Independent Study/Exploration

Friends Select allows juniors and seniors to pursue individual interests, talents, and passions through Independent Studies and Independent Explorations. These options are available when students complete all available courses in a subject area, or if the interest is far outside the scope of the current curriculum. Courses take place on campus under the auspices of an academic department. The student must demonstrate a strong commitment to the subject matter, either through past record, recognized potential, or a developing interest, and must demonstrate reliability in meeting personal responsibilities. To begin the independent study/exploration process, the student must submit a proposal to the associate director of upper school by the end of April for a first semester or year long course, or by the end of October for second semester courses. Proposals will be considered and approved by the Department Chair group. Typically, independent studies/explorations are taken as an extra course and cannot be used as a graduation requirement without explicit permission from the director of the upper school. On rare occasions, students can take more than one at a time.

An **Independent Study** requires a student to spend at least four hours over a six-day cycle dedicated to coursework, with between 60 and 120 minutes of this spent meeting with the teacher. The workload and assessments are comparable to a typical course, and a presentation at the end of the course is required. Grades and credit will be provided on student reports and transcripts and the grade will be included in the student's GPA.

An **Independent Exploration** allows students to delve into an interest in a less formalized way. Students will meet with the teacher at least 40-80 minutes per cycle, and workload and assessments are agreed upon by the student and teacher. These courses will appear on transcripts, with a designation of Pass or Fail, but students will not receive any credit from an Independent Exploration.

Upper School 2020-2021 Curriculum

Subject and Graduation Requirements	Grade 9	Grade 10	Grade 11	Grade 12
English (4 years are required. Electives taken during senior year. International students will be enrolled in both English and ELLSupport for 9th-12th grade, as indicated)	English 9: Exploration of Genre	English 10: World Literature	English 11: American Literature	Required Semester Electives: Monstrous Imaginings, <i>The Falcon</i> Production, Shakespeare, Caribbean Literature, Race Gender Nationality, Magical Realism, Film as Text
	ELL Support	ELL Support	ELL Support	
History/Social Studies (3 credits, including 9th, 10th, and US History)	Modern World History I	Modern World History II	United States History & Civics	Semester Electives*: African American History, History of Popular Music, The American Presidency, Liberty and the Law, Citizen Justice, Asian American History
Mathematics (3 credits, a year beyond Algebra II)	Algebra I or Geometry	Algebra II** or Geometry	Algebra II**, Pre-Calculus & Trigonometry, Calculus or Elective: Discrete Math, Advanced Calculus, Linear Algebra, Statistics, Multi-Variable Calculus	
Science (3 credits, including laboratory Physics, Chemistry and Biology)	Physics	Chemistry	Biology	Electives*: Advanced Biology, Advanced Chemistry, Advanced Physics, Computer Science, Environmental Science, Anatomy & Physiology, Sustainable Chemistry, Astronomy, Engineering, STEAM Advanced Projects
Language 2 years of the same World Language, taken consecutively during grades 9 through 12, up through and including level 3	Mandarin Chinese I/II Spanish I/II Latin I/II	Mandarin Chinese II/III, Spanish II/III/IV, Latin II/III	Mandarin Chinese III/IV, Spanish III/IV/V, Latin III/IV	Mandarin Chinese IV/V,VI Spanish IV/V/VI, Latin IV/V/VI
			Italian I	Italian I
Religious Thought (1 credit)	Quakerism and Comparative Religion	Peace and Social Justice: Beliefs into Action		
Fine Art (2 credits)	<u>Music:</u> Choir, Instrumental Ensemble, Percussion Ensemble, Chamber Music, Lab Band, History of Popular Music, Music Theory <u>Drama:</u> Drama I, Drama II, Technical Theater <u>Visual Arts:</u> Art Foundations (prerequisite for all major visual art classes), Studio 1, Advanced Studio , Advanced 2D Studies, Digital Art, Video Production, Metalsmithing/Glass, Portfolio Preparation, Advanced Metals/Glass, Sculpture and Material, Animation and Digital Storytelling			
Physical Education and Health (2 credits)	1/2 credit each year		Waiver option (two after-school sports or physical education) 1/2 credit each year	
Other	After School Activity: Sports or Drama			
				Senior Internship/Independent Project

*a total of 4 elective credits are required (elective credits are credits beyond the graduation requirements)

** Regular or Accelerated versions offered

Course Descriptions by Department

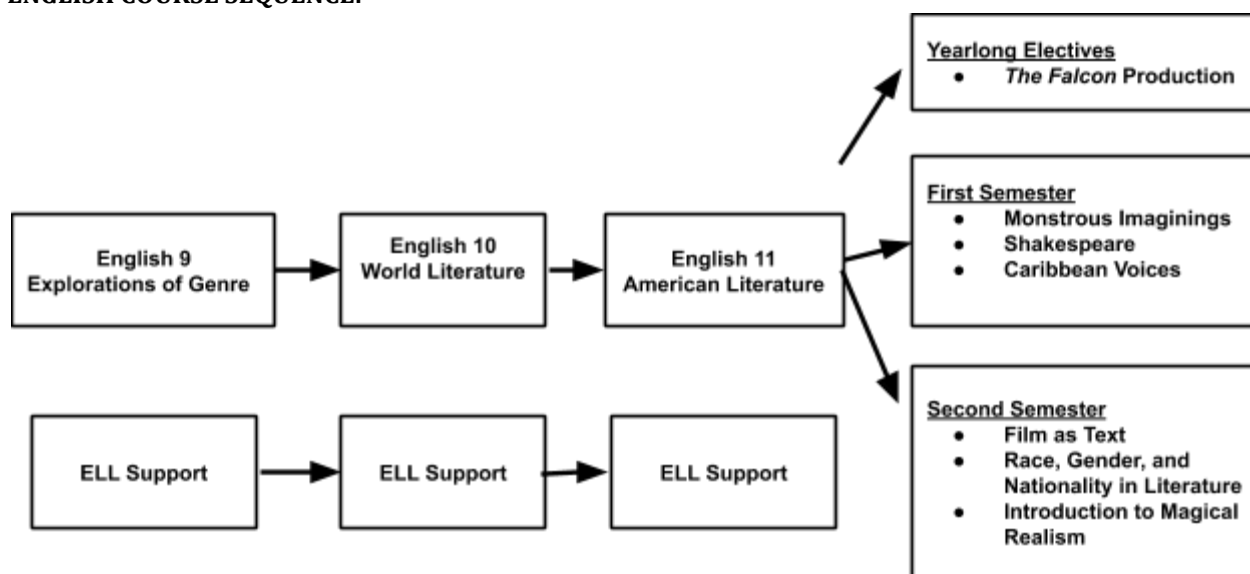
THE ENGLISH DEPARTMENT

The English department's mission is to promote both facility with the English language and students' appreciation of the rich traditions of literature in English and in translation. The goals are to provide each student with a strong literary background, to develop skillful writers and communicators through a rigorous, sequenced program, and to foster critical thinking. Core courses and electives are skills-oriented and meant to spark intellectual curiosity in our students.

The English department curriculum is richly diverse and firmly grounded in skill development. Reading, writing, listening, speaking, discussing, and vocabulary-building are stressed at every instructional level. Students read a variety of works of British, American, and World literature.

A range of electives is offered to seniors in each semester of the senior year and, with proper approval, to sophomores and juniors whose schedules permit their taking a second English course. Departmental electives may be designed around a genre, theme, region, historical period, or distinct author.

ENGLISH COURSE SEQUENCE:



E091 English 9: Explorations of Genre **ninth grade** **one credit**

English 9 is a year-long course that is an examination of genres; students study literature through an introduction to the formal features of fiction, drama, short stories, poetry, and memoir. Texts in the first semester are selected to provide clear examples of fiction and memoir. Readings include such works as *The Catcher in the Rye* and *I Know Why the Caged Bird Sings*. In the second semester, we explore more classical texts such as Shakespearean drama (*Othello*) and Greek tragedy (*Antigone*). We end the year with Sandra Cisneros's *The House on Mango Street*. The ninth-grade skills sequence extends the eighth-grade emphasis on mechanics and paragraphing to include more ambitious compositions such as the expository essay as well as various creative writings. Students work to develop original thesis statements which they learn to support with textual evidence and critical analysis.

E101 English 10: World Literature tenth grade one credit

English 10 is a year-long survey course on World Literature. Each unit will focus on a work of literature from a different time period, geographic locale, and cultural context. To gain a greater understanding of the universality of human experience, students will read texts such as *Twelfth Night*, *The Odyssey*, *Circe*, *Arabian Nights*, *Things Fall Apart* and a selection of myths and short stories. Students will be engaging with a variety of themes including the dangers of isolation, the breakdown of society, magic and monsters, gender roles and dynamics, and the universality of storytelling. Year-long reading goals consist of honing students' close reading skills and their ability to perform literary analysis through examination of stylistic elements, character development, and theme. Writing goals focus on mastery of the fundamental elements of the basic essay in its expository forms, with special emphasis on introductions, conclusions, and the use of textual evidence for support.

E111 English 11: American Literature eleventh grade one credit

English 11 is a year-long course in which students approach American literature thematically through a study of various genres, time periods, and perspectives. To gain a greater understanding of American identity, students will explore such works as *The Great Gatsby*, *Their Eyes Were Watching God*, *The Things They Carried*, *Beasts of the Southern Wild*, *We Need New Names*, and a play to be determined mid-year. Supplementary reading will include a range of short stories, poems, and essays by such writers as Hawthorne, Dickinson, Whitman, Edgar Allan Poe, Charlotte Perkins Gilman, Frederick Douglass, Sherman Alexi, Marilyn Chin, and Sandra Cisneros. Students will be expected to make in-depth connections between the different works, characters, modes and themes of American literature. In addition, students will continue to refine their grammar and compositional skills; to that end, they will write and revise personal, comparative, creative, and analytical essays of varying lengths.

ELLS English as a Second Language Support ninth-twelfth grade one-half credit P/F

ELL support is for all non-native English-speaking students who have not yet achieved communicative competence in reading, writing, listening, and speaking in English. The flexible nature of this program offers students the individual attention they need in order to build solid foundations in English. Placement into ELL Support is based on a student's proficiency with English and the discretion of the ELL and English department faculty. In the spring of the first year of ELL support and again in the spring of 11th grade, students are required to take the TOEFL to measure their language proficiency and growth in reading, writing, listening and speaking.

*Please note, students will have ELL Support in conjunction with English 9, 10, 11, and 12 to correlate with the grade they are enrolled in.

English 12: Electives twelfth grade one credit

Twelfth-grade English consists of two semesters of required elective courses that students select in the spring of the junior year. Depending on enrollment and scheduling, these electives may also be open to interested juniors.

Year-Long

EE71 *The Falcon Production* (yearlong) one credit

In this yearlong course, students will collaborate to create *The Falcon*, Friends Select's online newspaper. Students will learn writing techniques for a variety of journalistic prose, including hard news, features, investigations, reviews, and editorials. Students will explore how to recognize good stories, gather facts through interviewing and research, craft catchy leads and thought-provoking conclusions, and construct well organized articles that inform and engage the greater Friends Select community. Significant time will be devoted to the editing and rewriting process, enabling students to take their writing to a level of refinement that is appropriate for web publication. Emphasis will be placed on collaboration as students work together to brainstorm story ideas, structure each edition, serve as fact checkers and line editors, and create images to accompany written works. As students produce *The Falcon*, they will explore questions related to the role of news media in our society, journalistic ethics, and the impact of social media in news consumption.

Fall Semester

EE56 Monstrous Imaginings: The Unmaking of Humanity one-half credit

This is the stuff of nightmares, myths, and other legendary tales of horror: Ogres and werewolves, Dr. Jekyll and Mr. Hyde, Grendel, vampires, the Titans, androids and humanoids. Our exploration of monsters and monstrosity will lead, inevitably, to investigations of ourselves and our own humanity--our deepest fears, aggressions, and anxieties. In addition to reading short stories and longer novels, students will view and critique movies. Students will have an opportunity to explore some philosophy and literary theory as well. The texts may include: *Circe* (Miller), *Grendel* (Gardner); *Blade Runner* (Scott); *Binti* (Okorafor); *Dr. Jekyll and Mr. Hyde* (Stevenson); *I am Legend* (Matheson); *Pan's Labyrinth*; and selections of Octavia Butler's science fiction. Students will respond to readings through discussions and presentations and will compose analytical essays, short critical responses, and creative writing.

EE19 Shakespeare one-half credit

Shakespeare was a revolutionary: he challenged his peers to rethink their views of relationships, revenge, gender, class, religion, power, and countless other issues that get to the core of what it means to be a human in society. In this course, we will be delving into Shakespeare's legacy to explore more fully the enduring relevance of this literary master. Texts may include *Hamlet*, *King Lear*, *As You Like It*, and Shakespearean sonnets. We will work to bring the plays to life through performing in class, seeking out different productions, and exploring contemporary recreations of Shakespeare's classics. Students will write in a variety of modes including analytic, creative, and personal pieces.

EE65 Caribbean Voices one-half credit

This course introduces students to Caribbean literature (with a focus on contemporary voices) to better understand the history and identity of Caribbean peoples. We will read works by Edwidge Danticat, V. S. Naipaul, Jamaica Kincaid, Staceyann Chin, Junot Diaz, Kei Miller, and Derek Walcott to explore Haiti, the Dominican Republic, Trinidad and Tobago, Jamaica, St. Lucia, and Antigua, as well as the Caribbean-American experience. Texts will be sequenced chronologically, beginning with events during Trujillo's reign in the Dominican Republic in the 1930's, and ending with an exploration of what it means to be Caribbean American in the 21st century. Critical readings by Homi Bhabha, James Woods, and other scholars are also introduced. The Indo-Caribbean, Afro-Caribbean, and Latinx-Caribbean identities, colonialism, mimicry, immigration, and the complex social and sexual politics at work in these texts, are some of the topics we will explore in this course. Students will produce analytical essays, short critical responses, personal writing, and presentations.

Spring Semester

EE70 Film as Text: Double Features one-half credit

In this film course you will sharpen your critical viewing eye by learning about basic elements of cinema -- the effects of camera distance and angles; types of editing; uses of color, lighting, and sound; and the psychology of screen space. After watching a film (*for homework*),* we will use class time to analyze the movie just as we would any piece of literature, discussing themes, symbols, characters and uses of film techniques. Of course, there will be analytic papers, presentations, quizzes and tests. The structure of the course is built around pairings of films that take up similar ideas but from different points-of-view. Examples of pairings: coupling the wild satire of class difference in Joon Ho Bong's *Parasite* (2019) with Boots Riley's savage critique of capitalism in *Sorry to Bother You* (2018); or Jordan Peale's social thriller *Get Out!* (2017) coupled with one of the classic films that inspired it, 1968's *Rosemary's Baby* (or perhaps 1975's *The Stepford Wives*); or comparing two classic explorations of memory, *Eternal Sunshine of the Spotless Mind* (2004) and Hitchcock's 1958 masterpiece, *Vertigo*; or two female protagonists each taking the hero's archetypal journey in *Mad Max: Fury Road* (2015) and *The Wizard of Oz* (1939).

***NOTE:** *Films are viewed as homework.* There is no textbook, but the rental of films will obviously come with a fee. You most likely will have to subscribe to Amazon, Netflix or other streaming/rental sites to access the films.

EE64**Race, Gender, and Nationality in Literature****one-half credit**

In this course, students will study literature that explores identity and intersectionality. We will look at the ways in which the race, gender and nationality of authors and characters influence how they interact with the world. We will study how authors use literature to explore and complicate questions of race, gender and national identity. Texts may include *There There*, *Homegoing*, and a selection of poetry and essays. Students will be writing a variety of analytic, creative, and personal pieces.

EE68**Introduction to Magical Realism****one-half credit**

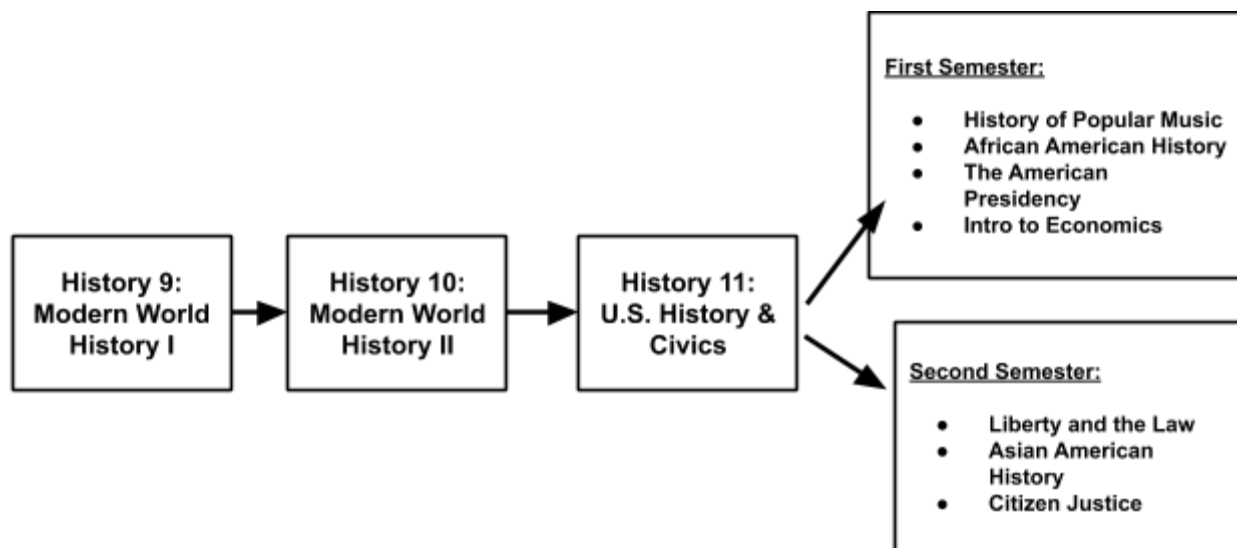
How porous are the boundaries between the real and the imagined? We will explore these spaces in literature from around the world in this introduction to magical realism. A genre of literature that incorporates fantastic or mythical elements into otherwise realistic fiction, magical realism emerged from Latin American and African authors such as Gabriel Garcia Marquez, Isabel Allende, and Amos Tutuola. Today, magical realism can be found in the works of authors from around the globe. We will read the aforementioned authors, as well as a range of contemporary voices, possibly including Yann Martel, Laura Esquivel, Haruki Murakami, Salman Rushdie, Mohsin Hamid, and Angela Carter. Students will respond to readings through discussions and presentations and will compose analytical essays, short critical responses, and creative writing.

THE HISTORY DEPARTMENT

The main focus of the history department is to guide students towards a better understanding of the complexities and challenges of our modern world, the richness and importance of its past, and the diverse peoples and traditions that have shaped it. The department emphasizes the skills of careful reading, respectful, focused listening, critical research and analysis, thoughtful writing, public speaking and presentation, as well as professionalism. The History sequence also aims to help students experience the joy of discovery that comes with robust inquiry, and offers students a wide array of opportunities to challenge their thinking and assumptions by hearing multiple perspectives. History courses are required in ninth, tenth, and eleventh grades, and the department offers semester electives after this sequence. Several of our courses present students with interdisciplinary experiences--particularly in art and music--as well as interdivisional activities, particularly with the lower school. The core courses provide a foundation for understanding the civilizations and political systems that have shaped the modern world. Periods of history in China, Japan, Europe, India and the Americas, for instance, are selected for exploration in the ninth and tenth grade years, and students examine American history and civics in eleventh grade. Electives offer students a look into more specific topics in politics and the social sciences, including many that examine modern political and social issues. These elective courses are designed to attract a wide range of student interests.

A major feature of the history program is the development of research and presentation skills. The ninth-grade curriculum includes several research projects, including the presentation of a work of art at the Philadelphia Museum of Art. In eleventh grade, students spend the fourth quarter researching and writing about a contemporary political issue for the Modern Issues Project, building a research network and interviewing experts and policymakers in Philadelphia and in Washington, D.C. as components.

History Course Sequence:



H091 History 9: Modern World History I

ninth grade

one credit

Throughout the year, students use primary texts and a range of secondary sources to study select eras and themes of revolution and transformation, including the Renaissance, 18th-century scientific and political revolutions in Europe and the Americas, their influences from and effects on the diverse peoples of Africa and Asia, conquest and colonization, and periods of early industrialization. Students will explore these eras using the thematic lenses of government, civil rights, religion, the arts, family, gender and commerce. The course will also feature specific units on Philadelphia history and studies of the experiences of Native American tribes. During the year, students visit the Philadelphia Museum of Art five times, making connections between the Museum's relevant collections and their studies. This culminates in a museum morning, where each student presents a work of art to classmates and parents. The ninth-grade skills sequence assumes students will apply both critical and creative thought to their work. Students' history skills in active reading and annotation, summarizing, outlining, oral presentation and a variety of writing types are developed through class lectures, discussions and a series of project-based activities.

H101 History 10: Modern World History II**tenth grade****one credit**

Building on many themes and questions from Modern World History I, Modern World History II will focus on major world transformations from the 19th-21st centuries, looking closely at Africa, Latin America, Russia, China, India and more. This course will explore imperialism, industrialization, communism, World Wars and movements for independence and civil rights. Students will examine these themes and topics from multiple points of view, so as to study the ways in which global interactions produce both short and long term consequences for all parties involved. In addition to making modern connections throughout the course, students will also look at discrete 21st-century historical and political topics. Throughout the year, students will work to develop and hone the necessary skills to be successful historians as well as reflective and empathetic global citizens. These skills include analyzing historical sources and evidence, 21st-century research literacy, and analytical and thesis-driven writing.

H111 History 11: U.S. History and Politics: Civics and the City**eleventh grade****one credit**

This course surveys key eras in U.S. history from the Civil War through 2020, with a special emphasis on understanding state and local political systems. Throughout the year, students examine from different points of view the political, economic and cultural forces that have shaped people's perspectives on history and politics. Each unit is built around selected primary sources and historical commentaries that draw from the Gilder Lehrman collection, contemporary news and the Congressional Research Service, as well as our school library's many databases, such as the New York Times Historic Collection and the JSTOR database of academic journals. In a wide variety of activities in and out of class, students work closely with these sources and become familiar with different academic approaches to studying history. In the fourth quarter, students complete a Modern Issues Project on an American political issue of their choosing. Students build research networks, interview experts and policymakers in Philadelphia and Washington, D.C. and ultimately produce an infographic, a paper and a presentation designed for a wide, interdivisional audience.

History Electives**Fall Semester****HE71****African American History****one-half credit**

This course is a survey of Black Studies from the African background to the African-American present. Topics include an exploration of the origins of Black studies as both an academic discipline and grassroots movement; the European slave trade and Middle passage experience; enslaved Africans and African Americans in British North America; African Americans and the American Revolution; Slavery and Antebellum America; Civil War and Reconstruction; African Americans in a Globalizing America to the Second World War; Cold War and Civil Rights; Black Power to the so-called "post-racial" America. Skills targeted in this course: enhanced literary analysis, nonfiction writing, critical thinking and live presentation.

HE74**The American Presidency****one-half credit**

It goes without saying that most people in the US (and around the world) would say that the presidency is at the center of the American political system and the most important political office in the land. This course examines the sources and limits of presidential power and the process of how presidents are elected into office. We will also explore how the presidency has changed over time and the ways various presidents have governed and conducted themselves while in office. Since the 2020 presidential election is right around the corner, we will also pay close attention to how the race for the White House is unfolding and consider the impact that events may have on the American political and social landscape for years to come.

HE77**Introduction to Economics****one-half credit**

This basic course will cover economic ideas such as opportunity cost, the production possibilities frontier, exchange/trade, the market, the theory of supply and demand, price controls, gross domestic products, consumer price index, etc. This is not intended to be an AP course. A major goal is to empower students to develop strategies to help them make effective decisions by weighing benefits and costs.

HE62	History of Popular Music (cross listed in Music Dept.)	one-half credit
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We will explore the development and history of American Popular Music through the lens of 4 different time periods and regions: Roots music in early 20th century New Orleans, the Great Migration in mid-century Chicago and New York; the Civil Rights Era in Detroit and Memphis, and the modern era in Los Angeles, Nashville, and New York. Academic readings, primary sources and listening will be part of this study as we examine historical and cultural influences, cross-pollination, and the evolution of new styles of music. No prior musical experience is required.

Spring Semester

HE53	Liberty and the Law	one-half credit
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This course provides an introduction to the American legal system, covering constitutional law and the appeals process, as well as criminal and civil law. Students explore the foundational concepts, procedures and principles in our common law system, as well as the history of our legal institutions and civil liberties. In doing so, students also consider broad questions about the role of law in society, the interaction between the different branches and levels of government, and the relationship between people and their governments. Students examine many sources, including the Constitution, case law at the state and federal levels, journal articles, films, editorials, and more. Participation in seminar-style discussions, debates, presentations (oral and visual), and writing are major components of the course, and students will also take part in several field trips around Philadelphia to visit courtrooms and talk with judges, lawyers, and other professionals in the field.

HE76	Citizen Justice	one-half credit
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This course will serve as an introduction to the ways in which private citizens have been able to use a variety of activities and resources, including volunteer and non-governmental avenues, in assisting and challenging law enforcement and the courts. The course will examine the ways in which citizens have effectively used various forms of media in the pursuit of justice, especially in those cases where it appears that justice has been delayed or denied. This has involved solving cold cases (unsolved criminal investigations which remain open pending the discovery of new evidence), challenging prosecutorial conduct, and appealing wrongful convictions. We will focus extensively on the history and evolution of Philadelphia's own Vidocq Society and will in fact have the unique opportunity to meet with the group's founder(s) and discuss the nature of their work. Students will examine a growing national trend of private citizens actively working to bring closure to America's enormous body of unsolved crimes and will use a variety of sources, including books, articles, podcasts, and other related social media. One of the questions this class will address is the nature of justice. How might Quaker values be expressed in greater citizen pursuit of true justice using 21st means?

HE75	Asian American History	one-half credit
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What is Gold Mountain? Where is Angel Island? What is the Yellow Peril? Who were the 442nd? What is orientalism? And, what is a “model minority”? This course offers participants a historic overview of the experiences of Asians in America from the 19th century to the present day. We will examine the push and pull factors associated with the migration of Asians to America and unpack the social and legalized forms of discrimination that they faced. We will explore topics associated with community formation, the lives of workers, the experiences of women, and the roles Asian Americans have played in the struggle for civil rights. We will also investigate how Asian Americans are represented and portrayed in popular culture and learn about the contributions that Asians have made to the American cultural landscape including Philadelphia.

RELIGIOUS THOUGHT

Religious Thought courses emphasize an exploration of spiritual, religious, and moral values through a study of several religious traditions and of contemporary issues. The required courses in the ninth and tenth grades employ a variety of teaching approaches, including formal study, informal discussion, and reflective writing.

R091 Quakerism and Comparative Religion ninth grade one-half credit

The ninth-grade Religious Thought course introduces students to the religious ideas, social concerns, current beliefs and practices, and historical background of the Religious Society of Friends (Quakers). These ideas and concerns are considered in relation to the students' own religious, philosophical, and ethical ideas. Basic tenets of Judaic, Christian and Islamic spiritual practices are studied. Through selected readings, students explore other aspects of spiritual searching through a brief exploration of Hinduism and Buddhism.

R101 Peace and Social Justice: Beliefs into Action tenth grade one-half credit

Tenth-grade Religious Thought is a semester long course which focuses on the themes of justice and peace. It will include an examination of some religious and spiritual responses to oppression and discrimination in its various forms, particularly racism, antisemitism, and sexism as well as oppression based on religious extremism. Through close critical reading of three autobiographical accounts (*Night*, by Elie Wiesel, *Persepolis*, by Marjane Satrapi, and *Assata*, by Assata Shakur) of responses to oppression we will seek to discern the origins, patterns, effects and possible solutions for social injustice. The course will also provide an opportunity for students to explore their own personal journeys, spiritual and ethical beliefs and those of others.

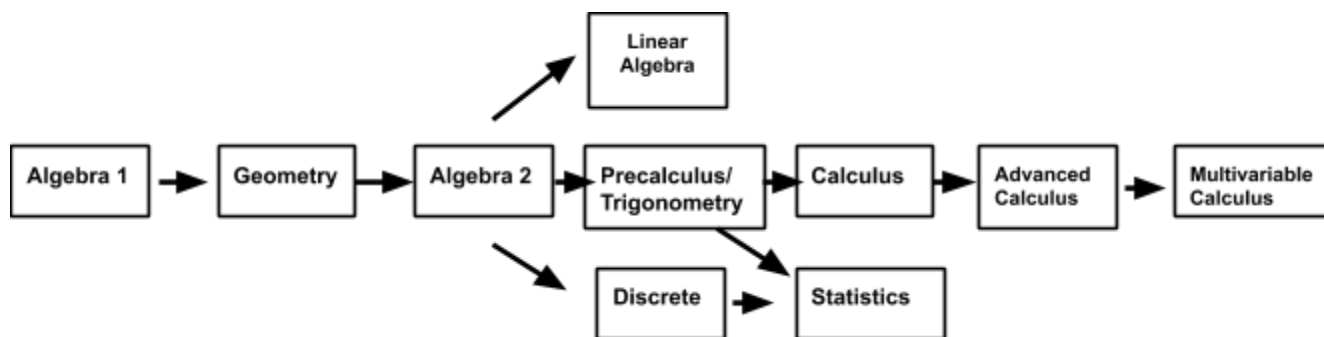
THE MATHEMATICS DEPARTMENT

The mathematics program is designed to help students master basic algebraic and geometric skills needed for work at the college level. Foundational courses stress the development of problem-solving skills and the use of logical patterns needed to write a valid proof. Along with skills, the mathematics department stresses the historical development of ideas and their aesthetic aspects through class discussions and projects. The Math/Science Symposium, which is held in April, offers students an opportunity to share with the community their research into mathematical topics or problems. The department strives to meet the needs of each student, so that everyone can realize his/her mathematical potential. (AP) denotes that a particular course provides students with the background needed to take the College Board Advanced Placement exams, though additional preparation outside of class is highly recommended.

With departmental permission, students may elect to accelerate in the mathematics sequence by taking advantage of the Summer Academic Program. The following courses may be offered: Geometry and PreCalculus.

One year of math beyond Geometry and Algebra II is required for graduation. To satisfy this requirement, students follow the sequence below:

Math Course Sequence:



M091 Algebra I one credit

This course focuses on strengthening students' computational skills in solving equations, and graphing linear equations. Topics include: simplifying expressions (polynomials, exponents, roots, rational), solving linear and quadratic equations and inequalities, solving systems of linear equations, and graphing linear functions. Students apply these skills to a variety of projects and problems throughout the year. Since the course is a prerequisite to the three-year required math sequence, it does not count as one of the three math credits required for graduation.

M101 Geometry one credit

Geometry exposes students to topics in Euclidean geometry and to logic with deductive proofs. Students study polygon properties and theorems (especially triangles), circles, congruence and similarity, trigonometric ratios, and areas and volumes. Students work with compass and straightedge constructions as investigation tools and proof verification. A variety of algebra skills are also reviewed. Daily homework requires students to apply concepts addressed in class to problems in creative ways. Student projects on various topics are included as part of their assessment.

M921	Algebra II	one credit
M922	Accelerated Algebra II	one credit

Algebra II develops algebraic and geometric skills in preparation for Precalculus/Trigonometry. Students study the major functions: linear, quadratic, polynomial, rational, radical, exponential and logarithmic. Topics include function operations, inverse functions and domain and range. Simplifying, solving and graphing techniques are developed throughout the year. Students become familiar with using the TI-84 graphing calculator to supplement their understanding. Accelerated Algebra II will move at a brisk pace and will assume a strong foundation of algebraic skills. Students should only take Accelerated Algebra II if they have achieved a high level of success in previous mathematics courses, earning a B+ or higher in Geometry and a B+ or higher in Algebra 1, and if they are seeking ways of being challenged in mathematics. There will be an emphasis on abstraction, derivation, proof and problem solving and additional topics will be examined if time permits.

M111	Precalculus and Trigonometry	one credit
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This course is a preparation and prerequisite for Calculus. Students study analytic geometry, conic sections, trigonometry, polar coordinates and complex numbers, sequences and series, and an introduction to limits and derivatives. Vectors and matrices will be discussed if time permits. Graphing calculators are used throughout the course. Students must supply A TI-84 or similar graphing calculator. Prerequisite: B or higher in Algebra II and teacher recommendation.

M129	Discrete Mathematics	one credit
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Discrete Mathematics is the study of mathematical properties of sets and systems that have only a finite number of elements. This course will explore famous, modern day mathematics problems (four color theorem, traveling salesman problem, etc) and will introduce students to a variety of topics, which may include: topology and graph theory, game theory, social choice theory, probability, logic, cryptography and matrices. There will be an emphasis on problem solving, project-based learning, collaboration and applications. Prerequisite: completion of Algebra II or departmental permission.

M117	Statistics	one credit
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Statistics is the science of data -- how to collect, organize, analyze, and interpret them. Students are encouraged, through theory and application, to employ methods of working with data and statistical reasoning to help separate "sense" (valid and reliable research) from "nonsense" (invalid and unreliable research) in the flood of data we live in. The following topics are studied: variables, measurement, scales, frequency distributions, central tendency, variability, normal distribution and standard scores, probability, correlation and regression, distribution of sample means, confidence interval estimates, and hypothesis testing. To supplement these studies, projects and computer work will constitute a major part of the course. In addition, students will (1) present case studies involving questionable data in an attempt to analyze, critique, and/or validate content, (2) create and implement their own research study, and (3) complete computer activities following specific units. Students must supply a TI-84 calculator or equivalent. Prerequisite: successful completion of Pre-Calculus or Discrete Mathematics or departmental permission.

M121	Calculus	one credit
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This course builds upon concepts mastered in the algebra and precalculus courses. It covers limits of functions, and differentiation and integration of polynomial, rational, root, exponential, logarithmic and trigonometric functions. Students will work through the theory of differentiation and integration, and they will be exposed to applications of both. A TI-84 or similar graphing calculator is required. If students wish to take the AP exam, this course will help to prepare students for the AB Calculus exam, though extra preparation outside of class will be necessary. Prerequisite: B or higher in Precalculus. (AP)

M135 Advanced Calculus one credit

This course, equivalent to a second or third course of college calculus, develops the ideas acquired in calculus and extends to further techniques. Topics include: advanced integration techniques, l'Hopital's Rule, improper integrals, infinite series, conics, parametric and polar equations, vectors and vector-valued functions. If time permits, students may explore functions of several variables and multiple integration. A TI-84 or similar graphing calculator is required. If students wish to take the AP exam, this course will prepare students to take the BC Calculus exam. Prerequisite: B or higher in Calculus. (AP)

M122 Linear Algebra one credit

Linear algebra provides a foundation for students to continue their studies in mathematics, computer science, or other sciences. The curriculum includes: linear systems of equations, vectors, determinants, vector spaces, subspaces, spans, linear dependence and independence, basis and dimension, eigenvalues and eigenvectors. Prerequisite: B or higher in Accelerated Algebra II or teacher recommendation.

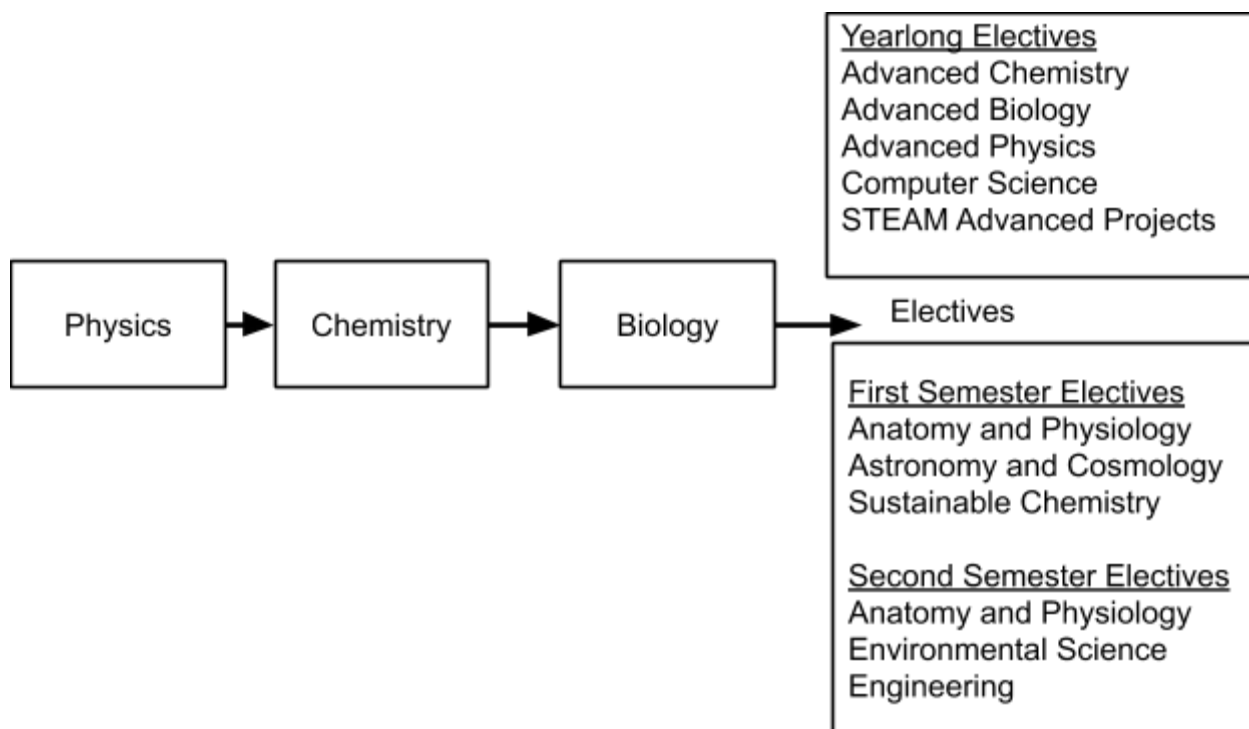
M139 Multivariable Calculus one credit

This course builds upon concepts mastered in the calculus and advanced calculus courses. The following are topics covered in the course: vector-valued functions, functions of several variables, multiple integration, and an introduction to vector analysis. Students acquire a rigorous mathematical foundation so that they may pursue more advanced work. A TI-84 or similar graphing calculator is required. Prerequisite: B or higher in Advanced Calculus and a love of mathematics.

THE SCIENCE DEPARTMENT

The Upper School science program strives to provide students with a thorough appreciation of the more rigorous core sciences as well as an opportunity to explore more individual interests through our variety of electives. In all classes, we aim to foster each student's intellectual curiosity and appreciation of the creative aspects of discovery. We aim to teach beyond just textbook learning, by engaging students in inquiry-based activities, hands-on laboratory experiences, problem-solving engineering practices, and independent study. To further enhance each student's experience, we extend our laboratories beyond the classroom into the city of Philadelphia. From chemistry students visiting PAFA to learn about chemical restoration, to biology students visiting nearby medical school cadaver labs, we value showing students how science is practical and tangible and how it relates to their lives in invigorating ways.

In the upper school, we require students to fulfill three science credits by taking Physics, Chemistry, and Biology, and we encourage students to take further elective courses simultaneously or thereafter.



SP91 Physics ninth grade one credit

This course is a conceptual introduction to the principles of physics, with emphasis on problem-solving using basic algebra skills. Students strengthen their algebraic and geometric reasoning skills by connecting equations to the physical world. Through hands-on explorations and group activities, students gain a deeper understanding of principles of physics that affect them every day. Topics include motion, forces, energy, electricity, magnetism, and waves. They are guided through the practice of scientific investigation through activities that require graphing, writing laboratory reports, and analyzing data.

SC91 Chemistry tenth grade one credit

This course provides a basic foundation in chemistry while emphasizing the role of chemistry in our surrounding world and the importance of scientific inquiry for learning and innovation. The chemical and physical properties of elements and compounds as they are related to atomic structure, bonding, and the modern periodic table are examined. Mass relationships in chemical reactions and some common types of reactions are also covered.

S101 Biology eleventh grade one credit

This yearlong course explores the big picture and nuances of introductory biology. Through daily class discussions, interpretation of scientific text, and laboratory investigation, this class challenges students to sharpen their critical thinking and analytical abilities. During laboratory activities, students apply their scientific method skills to the study of life. Topics covered include: evolution, cellular and molecular biology, plant and animal biology, genetics, populations, and ecology.

Science Electives

Yearlong

S120 Advanced Physics one credit

This class is a calculus-based study of physics intended for students with a high level of mathematical skills who are interested in applying those skills to the principles of physics. Topics include mechanics, electricity, and magnetism. The rigorous mathematical study of the subject is balanced with hands-on explorations and experiments where students design apparatus and procedures. Students are encouraged to become independent problem-solvers, connecting observations, intuitions, principles, and mathematics. Prerequisite: Calculus (may be a co-requisite).

S123 Advanced Chemistry one credit

The Advanced Chemistry course is designed to apply greater mathematical rigor to the principles and concepts that were introduced in Chemistry. A larger emphasis will be placed on student inquiry and problem solving to further investigate many of these principles, and a greater emphasis will be placed on possible careers in chemistry. Atomic structure and chemical bonding is studied in greater depth. Chemical reactions are studied in terms of both kinetics and thermodynamics. The concept of chemical equilibrium is introduced using specific examples of acid/base and solubility equilibria, and equilibrium considerations will be connected to thermodynamic principles. Prerequisite: B+ or higher in Chemistry.

S124 Advanced Biology one credit

Advanced Biology is a yearlong course that is designed for students who have a deep interest in the life sciences and have a solid understanding of biology from a previous high school level course. In addition to learning about basic biological themes in greater depth, students are exposed to more advanced subject matters such as biotechnology, microbiology, and biostatistics. Emphasis is placed on experimentation and advanced laboratory activities. Prerequisite: Chemistry and B+ or higher in Biology.

C101 Computer Science one credit

The aim of this course is to provide a foundation in computer science both to students interested in pursuing software engineering as a career, as well as to students who are interested in experimenting with new media. Students will learn to write programs in Python that can solve math problems, sort data, communicate with the internet, and generate interactive experiences. By working with hardware such as Arduino microcontrollers, students will develop an understanding of how information is collected, routed, and changed as it passes through a computer program. A firm grasp of Algebra is an advantage to students taking Computer Science, but this course will value creativity and collaboration as much as logic and clarity. In addition to creating programs to solve problems, we will be discussing social issues around encryption, digitization, and technology.

ST10 STEAM Advanced Projects one credit

Building on the foundation laid by other courses in our STEAM program, students in STEAM Advanced Projects will develop and commit to a challenging year-long project that both draws upon and deepens their skills and knowledge. The “possibility space” of these projects is intentionally large and driven by students’ interests: projects might involve web & software development, robotics, animation & filmmaking, product design, and/or electrical engineering. Projects could also integrate elements of entrepreneurship and authentic problem-solving around environmental & social justice issues. Working alone or in small groups, students will utilize rigorous formal production processes to schedule tasks and hit the milestones necessary to carry an ambitious STEAM project from concept to final product. Strong motivation and organizational skills are expected in this intensive, self-driven course, and enrollment is contingent on approval from the STEAM Program Director.

Prerequisites: Computer Science, Engineering, Robotics, Animation & Digital Storytelling, or by permission of instructor

Fall Semester

S131 Fall Anatomy and Physiology one-half credit

In this semester course, students study the human body’s structures and functions. Associated diseases and pathology are also explored, often through case studies. Through laboratory activities, various field trips, and guest speakers, students achieve a deeper understanding of the human body, diseases, and medicine. Please note, there will be six required walking visits to the College of Physicians, which will impact part of your lunch break.

S127 Astronomy and Cosmology one-half credit

In Astronomy, students will investigate the most ancient questions that humans have been asking since they first looked into the sky. What are the objects we see in the sky? Why do they appear to move throughout the night and seasons, and can their movements be predicted? How can these movements be explained and how do they influence life on Earth? How did it all get started and what will eventually become of these celestial bodies? By the course’s end, students should be able to provide reasonable answers to these questions and hopefully be inspired to share their answers and insights with others. We will also be going on three field trips during this course (two of them during the late afternoon/early evening, so that we can make night sky observations through our telescopes).

S130 Sustainable Chemistry one-half credit

Why do we want a sustainable energy future and how can we best achieve it? In order to answer these questions we need to first understand our current energy landscape and how our energy usage impacts the environment. We will start the semester by answering the questions: How do fossil fuels produce energy and what are the environmental impacts of using fossil fuels? With this background, we will then turn to exploring renewable energy resources including biomass, wind, water, solar, and geothermal. We will also briefly explore the role nuclear power can play in our path to a sustainable energy future. We will learn how each resource works to generate electricity and consider both the promise and the limitations of each resource. Topics throughout the semester will be presented in the context of what is happening in Philadelphia and an emphasis will be placed on lab activities.

Spring Semester

S131 Spring Anatomy and Physiology one-half credit

In this semester course, students study the human body’s structures and functions. Associated diseases and pathology are also explored, often through case studies. Through laboratory activities, various field trips, and guest speakers, students achieve a deeper understanding of the human body, diseases, and medicine. Please note, there will be six required walking visits to the College of Physicians, which will impact part of your lunch break.

SE03**Engineering****one-half credit**

Engineers are experts at breaking complex problems down into manageable, solvable parts. When they recombine their solutions into something nobody has ever seen before, we call it innovation. By combining NASA's Engineering Design Process and Stanford's Design Thinking Process, students will develop innovative solutions to real-world challenges. Students will learn how to develop ideas from drawings to models to full-scale prototypes. We will use both computer-aided design and hands-on prototyping with a variety of materials in this heavily collaborative course.

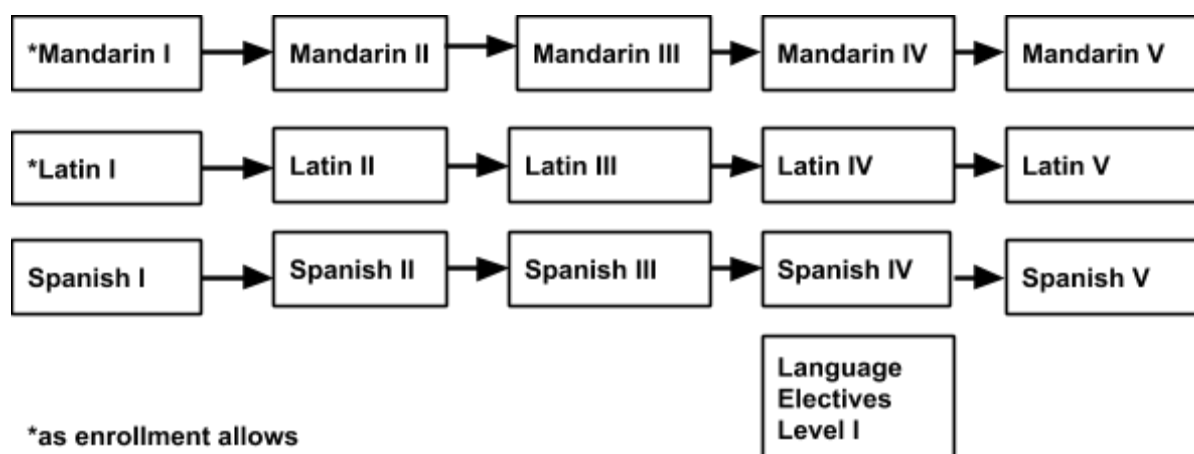
S126**Environmental Science****one-half credit**

How does nature sustain life? How do we interact with our natural environment? How can we live in a sustainable fashion? These are the broad questions students explore in the semester-long environmental science course. Students utilize their knowledge of general biology and chemistry to study the dynamics of ecosystems. In an effort to understand the benefits and challenges of sustainability, students analyze the causes and consequences of major environmental problems, as well as discuss possible solutions. Students conduct laboratory experiments, work collaboratively on problem solving activities, go on field trips, and complete an independent research project.

THE WORLD LANGUAGES DEPARTMENT

The world languages program is designed to equip each student with a functional level of proficiency in the oral and written use of a world language, as well as knowledge of the literature, culture, and traditions associated with the countries where it is spoken. In the modern language courses, classes are conducted primarily in the target language. A wide variety of teaching methods is used to stimulate interest and to respond to diverse learning styles. These include but are not limited to the use of gestures, drama, images, stories, field trips, and films. In addition, the Spanish and Mandarin Chinese curricula feature interactive learning that incorporates activities with current technology, website links, and student tutorials. Two years' study of one world language in the upper school, up through and including level three, is the basic requirement for graduation. Students entering upper school who have demonstrated mastery of level one skills must complete two consecutive years of the same World Language, per the previous requirement. Each year students' aural/oral proficiency is assessed through an individual oral exam in Mandarin Chinese, Spanish, and in some elective classes. At levels one through three, students also sit for a written exam at the end of the year.

World Languages Course Sequence:



LL10 Latin I one credit

This introductory course in Latin develops the vocabulary, grammar, and syntax needed for successful translation and composition of the target language. Over the course of the year, students work towards fluency in reading and writing basic Latin passages. Exercises in speaking and listening to active Latin further support acquisition of the target language. Students also learn elements of Greco-Roman mythology and Roman daily life over the course of the year and critically engage with Classical reception in the United States.

LL20 Latin II one credit

This course builds upon the skills developed in Latin I. During this course students are introduced to more complex grammar and sentences, which allows them to read passages of unabridged Latin. The cultural and historical material covered during Latin II will deepen the student's knowledge of mythology and the history of the Roman Empire. Students will also write reflections on articles engaging with the Classical discipline, the history of Classics, and current events in the field.

LL30 Latin III: Roman Women one credit

This course begins with the final stages of grammar introduction and translation practice. The focus of the course in Latin III is Roman women. Through readings in Latin and in translation, students will explore the roles of women in Roman society as well as the challenges they faced due to their gender. Readings include selections from Livy *Ab Urbe Condita*, Cicero and Sallust on 'bad' women, the funerary inscription *Laudatio Turiae*, Pliny's letter on Arria, and selections from I Corinthians. There will also be supplementary readings focusing on modern issues and the modern reception of Classical figures, which students will be asked to write reflections about. Projects during the year will include looking at women in Roman art and creation of a funerary inscription in Latin.

LL40 Latin IV: Augustus one credit

In Latin IV, students will focus on the topics of imperialism and nationalism, through the figure of the first emperor Augustus. Since imperialism and nationalism are modern constructions, students will be challenged to compare and contrast Roman empire building and national presentation with modern examples from European colonialism until today, and to think critically about the ways in which Greco-Roman antiquity has been used to justify such endeavours. Readings will include *Res Gestae Divi Augusti*, passages about the greatness of Rome from Vergil's *Aeneid*, and the creation of the other through speeches in Tacitus *Agricola*. Readings in Latin will be supplemented with readings in translation and modern articles on the topic upon which students will write reflections. Projects during the year will include looking at the imperial policy of Augustus, the role of propaganda in maintaining an empire, and how architecture and the organization of space play a role in furthering nationalist policies. Students will also engage in service learning during the year, comparing and contrasting social justice issues in the ancient world and today.

LL50 Latin V: Race and Ethnicity in the Ancient World one credit

In Latin V, students will look in-depth at race and ethnicity in the Greco-Roman world. We will begin by thinking critically about race theory and what we mean by the terms 'race' and 'ethnicity' today, and how modern interpretations of race were framed and justified by looking to the ancient world. Students will then read widely in both Latin and English about the ways in which Romans presented people around the ancient Mediterranean in relation to themselves, and how they discussed different peoples based on appearance, behavior, and geographical location. Students will focus on the types of language used by Roman authors to describe different groups of people and the ways in which that language has been received in modern discussions of race and ethnicity. During the course, students will be asked to engage with the ways in which people are dealing with racism in the field of Classics and how classical models are being used to justify actions of white nationalists in America and Europe. There will be weekly readings of and reflections on modern articles that discuss race, racism, and ethnography in the ancient and modern worlds. Students will also engage in service learning during the year, comparing and contrasting social justice issues in the ancient world and today.

LL60 Latin VI one credit

This course, an advanced study of Latin literature, may be offered as an independent study.

LM 10 Mandarin Chinese I one credit

Mandarin Chinese I is an introduction to the Chinese language and culture. It emphasizes interpersonal language skills in listening, speaking, reading, and, to a lesser extent, writing. These are presented in the context of everyday situations such as school routines, family, and food. Students acquire simple conversational skills and learn about Chinese culture and history. In-class skits and short presentations further develop students' confidence in their abilities. Grammar is interwoven into the learning experience. Chinese culture will be introduced through content-related projects, as well as interactive and hands-on activities.

LM20 Mandarin Chinese II one credit

This course reinforces and builds upon the foundations of vocabulary, structure, character recognition, and oral communication skills gained in Mandarin I. Students study some of the more complex sentence patterns of Mandarin, while adding further vocabulary of daily life and expanding their listening, speaking, reading, and, to some extent, writing abilities. They also delve deeper into the lifestyle, culture, and history of the Chinese people through presentations of music, art, film, and dialogues.

LM30 Mandarin Chinese III one credit

The third level of Mandarin moves students further beyond rudimentary language and into more complex conversational structures and vocabulary. Students engage with topics from Chinese society and culture and utilize more advanced language patterns in real-life scenarios. They also continue to improve their listening and reading comprehension. Writing skills are developed as speaking proficiency improves. Videos, sound clips, articles, music, and art facilitate the students' interaction with the target culture and aid their language acquisition. Group discussion and projects allow students to refine their communication skills.

LM40 Mandarin Chinese IV one credit

This advanced level of Mandarin continues to build upon the grammatical and lexical base students have built in their previous study. Group discussion continues to be an important component of advancing their language skills. Reading and discussion themes center on current events using news articles. Students expand their knowledge of politics, history, and societal issues from China's ancient period through present day. Culture is examined through a variety of media (i.e. music, art, film, and short stories). To enroll in Level IV, students should have earned a B average in Level III and receive the permission of the instructor.

LM50 Mandarin Chinese V one credit

This advanced level of Mandarin continues to develop the grammatical and lexical base students have built in the previous study. A variety of literary, historical, and cultural readings is used to increase the students' facility in using the language. Advanced grammar topics are introduced to help students become more proficient language learners. Participation in class discussions is emphasized and frequent student presentations in the target language are expected. Chinese culture is examined through a variety of media (i.e. music, art, film, and short stories). To enroll in Level V, students should have earned a B average in Level IV and receive the permission of the instructor.

LM60 Mandarin Chinese VI one credit

This course, an advanced study of Mandarin, may be offered as an independent study.

LC10 Introductory Cantonese one credit

This course is designed for students with a foundation in Mandarin Chinese. This course introduces students to practical vocabulary for use in real-life, everyday situations. Students learn elementary structures that allow them to understand and express themselves in speech as they build a solid foundation in the language. Class time is largely dedicated to practice using the spoken language, employing both structured and more open-ended, creative exercises. The instructor will make frequent connections to Mandarin Chinese to help students build upon their previous language study. Learning is supplemented with authentic materials including audio, film, video, and level-appropriate readings.

LS10 Spanish I one credit

This course helps students to develop the skills of listening, reading, and producing Spanish in natural social contexts. Writing is developed alongside the communicative skills. The use of images, video clips, and props enhances student comprehension in the target language. Grammar covered includes present tense verbs, accurate adjective use, question formation, pronouns, and other structures necessary for novice learners. Skits, oral presentations, and level-appropriate readers will help students reinforce and retain the various skills they have learned.

LS20 Spanish II one credit

This course reinforces and expands upon the acquisition process started in Level I. Students increase their ability to express themselves in the language through skits, games, oral presentations, video, and level-appropriate readers. Students will acquire a greater facility with additional grammatical structures that allow them to express more complex ideas within the past, present, and future time frames. Students will be able to communicate with greater fluency in more diverse situations.

LS30 Spanish III one credit

This course further reinforces meaningful, accurate communication in the target language. More advanced grammar constructions are presented, which students will incorporate in a variety of real-world contexts. Reading and writing are at a more advanced level, and students begin analyzing literature using level-appropriate readers. Students read, discuss, and write about current events and the culture of the Spanish-speaking world. Creative projects and film provide opportunities for students to deepen their understanding of the language and culture.

LS40 Spanish IV one credit

This course immerses students in a closer examination of literature. Students read, discuss, and write critically on short stories, poems, plays, and novels. Literature and film are presented within their historical and cultural context, and a grammar review supplements classroom activities, readings, and written assignments. A greater degree of sophistication and command of the grammar are acquired through written essays and classroom discussions. The students will listen, read, discuss, and analyze current events and the culture of the Spanish-speaking world. Students are exposed to literature from various cultures and have an opportunity to do their own creative writing as well. To enroll in Level IV, students should have earned a B average in Level III and receive the permission of the instructor.

LS50 Spanish V one credit

At this level more complex works are read and analyzed. Video and film continue to supplement the literature as a means to examine the historical and social contexts of the language. Students read literature from a variety of authors, countries, time periods, and styles. The course will engage students on a more advanced level as they explore, discuss, present, and write extensively on themes such as social justice, authority, gender, and duality. This course prepares students for college-level work in world languages. Enrollment is by permission of the department.

LS60 Spanish VI one credit

This course, an advanced study of the language, may be offered as an independent study.

World Language Electives

Italian I, French I, German I, and Greek I will be offered as interest demands. These courses are offered on a rotating basis as electives and are designed to allow students to build upon the language skills acquired in their previous study of world languages. These elective courses do not fulfill the language requirement for graduation.

For the 2020-2021 academic year, the following elective will be offered:

LI10 Italian I one credit

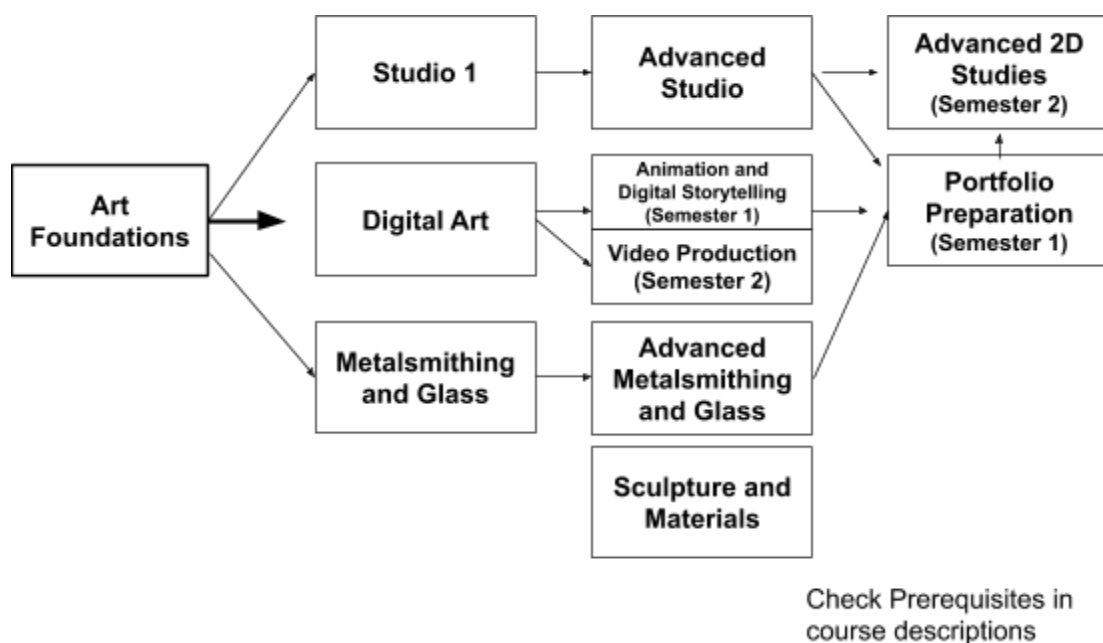
This course introduces students to practical Italian vocabulary for use in real-life, everyday situations. Students learn elementary structures that allow them to understand and express themselves in both speaking and writing as they build a solid foundation in the language. Class time is largely dedicated to practice using the spoken language, employing both structured and more open-ended, creative exercises. The instructor makes frequent connections to Latin and Spanish to help students build upon their previous language study. Learning is supplemented with authentic materials including audio, film, video, and level-appropriate readings.

THE VISUAL ARTS DEPARTMENT

The visual arts program in the upper school is an integral part of the curriculum at Friends Select. We seek to nurture each student's creative potential through practicing skills and engaging with art making as a means of expression, communication, revolution, and celebration. Each student will participate in exhibiting his or her work within the school community several times a year. Oral critiques are a regular component of our visual art courses and offer students a chance to share questions and insights about their own and each other's work. We offer local and regional museum and media field trips in order to involve students directly in the aesthetic, historical, and cultural aspects of the art world.

Each course in the visual arts curriculum is sequentially designed so that students develop basic visual, design, and technical skills in two or three-dimensional media. The course sequence begins with Art Foundations, a survey class in design that introduces students to the artistic disciplines we offer. Thereafter, students choose their courses in our 2D, 3D, and/or digital tracks. In each course as they demonstrate competence and interest, students are encouraged to initiate projects that deepen their technical study and foster their personal creative practice.

Visual Arts Course Sequence:



VA10

Art Foundations

one credit

Art Foundations is a prerequisite to all other visual arts courses. This class provides students with an introduction to the tools and media used in two dimensional, three dimensional, and digital art. Students will investigate various modes of artistic expression, including drawing, painting, collage, clay sculpture, digital painting, digital image manipulation, and CAD. Projects will be grounded in the fundamentals of the visual language (line, shape, color, form, space, texture, composition, and pattern), and will be inspired by prevalent themes in art history and contemporary art. Working from direct observation as well as through conceptual, design-based challenges, students will strive to develop their ability to use the visual language in service of personal expression. Through regular written reflections, emphasis will be placed on developing each student's understanding of their own creative process as they learn how to develop ideas into strong final products. There is a \$50 lab fee for this course.

VA90 Studio 1: Drawing, Painting, Printmaking, Mixed Media one credit

In this course, students combine their creative ideas with technical exercises to become proficient in composing two-dimensional imagery. Students will work with an array of drawing and painting materials, including graphite, charcoal, pen, watercolor, and acrylic paint. We will explore relief printmaking and create mixed media images through photo transfer, plaster, and various forms of collage. Students will look at the works of both historical and contemporary artists and investigate ways to use art as a means of communication. Projects range from direct observational studies and imaginative pieces to in-depth study of portrait drawing and painting. There is a lab fee of \$50 for this course.

Prerequisite: Art Foundations

VA91 Advanced Studio one credit

This course will offer students an opportunity to continue developing their artistic voice through their exploration of image-making. Students will continue to work on techniques in drawing and painting, focusing on the more nuanced skills of atmospheric painting, capturing motion, edges and transparent layering. We will talk about a variety of forms of narrative image making. Material explorations will include oil painting, drypoint etching, silk screening, and gilding. Students will begin to identify themes and technical concepts that are important to them, to narrow thematic and material interests for portfolios, and to build a cohesive body of work. There is a lab fee of \$50 for this course.

Prerequisite: Drawing and Painting I and permission of instructor

VA85 Advanced 2D Studies (semester 2) one-half credit

This course is designed to help you continue to grow toward independence in your artistic practice. You will have an opportunity to reflect on your artwork and explore the materials, techniques, and concepts in 2D image making that have captured your interest. With guidance, each student will design, plan, and create their own project from start to finish. Concepts can involve home, family, society, politics, religion, the environment, literature, poetry, and appreciation for the everyday. Through these in-depth and personalized projects, students will learn to find even broader ways to express their ideas artistically and to plan for materials, budget time, and complete large-scale projects. There is a \$50 lab fee for this course.

Prerequisite: Advanced Drawing and Painting, Video Production, Animation, or permission from instructor

VA87 Digital Art: Photography, Graphic Design, and New Media (year long) one credit

In this course, students will dive deeply into technology-based art mediums as they investigate ways to use technology as a tool to create personal and thought-provoking works of art. In the fall, students will learn the ins and outs of DSLR manual camera use and Adobe Photoshop, developing their photography, photo manipulation, and graphic design skills. Techniques including cinemagraphs, photo montage, and commercial graphics will be explored. In the spring semester, students will experiment with projections, CAD and 3D printing, and laser cutting. Projects in this course will be inspired by prevalent themes in art history and contemporary art, with significant room for personal voice and student choice. Students in this course will be expected to maintain a professional website with images and written reflections.

There is a \$100 lab fee for this course.

Prerequisite: Art Foundations

VA88 Video Production (semester 2) one-half credit

In this semester long course, students in grades 11 and 12 will learn the basics of video pre-production, production, and post-production as they collaborate to create short films. Storyboarding, scripting, shooting with a DSLR camera, and editing in Adobe Premiere CC, students will create a variety of projects that focus on different techniques, skills, and genres. Projects will include stop motion, highlight reels, short fiction, and documentary, along with an introduction to basic sound production and special effects. Essential film history and theory will be explored as students incorporate techniques and styles of important filmmakers of the last century into their own work. Students in this course should expect to intensively collaborate with peers as they rotate through roles as director, cinematographer, production assistant, and actor. Students will premiere their films at a screening in the Blauvelt Theater.

There is a \$50 lab fee for this course.

Prerequisite: Drawing and Painting 1, Photography, Animation, Metals and Glass, or permission from instructor

VA86 Animation and Digital Storytelling (semester 1) one-half credit

Beginning with the humble photon, students in this class will utilize the animation process to deconstruct and ascend through five layers of filmic complexity: the space, the frame, the performance, the shot, and the film. While building an understanding of how filmmaking technologies work, students will simultaneously engage in the process of crafting a good story and deciding how best to tell it. By creating simple hand-drawn animations on an iPad, students will pull their ideas out of their minds and onto screens — not just as evocative images, but as powerful stories unfurling on the dimension of time. Because our films will be narrative in nature, they will require formal ideation, preparatory drawing & sculpting, screenplay writing, storyboarding, and production design. Good creative processes will be emphasized at least as much as final products, and intensive, multidisciplinary collaboration will be expected in this STEAM course.

Prerequisite: Drawing and Painting 1, Photography, or Metals and Glass 1

VA81 Metalsmithing and Glass one credit

This course emphasizes metalsmithing skills, jewelry design and glass. Students will be introduced to the history, science and design of metals as well as appropriate skills in sequence. Techniques to be explored will include stone cutting and setting, raising, forging, soldering, lost wax casting, photo etching and chain making. Among the projects students will work on, will be making a silver ring with cut stone, box construction, making a forged bracelet, making a raised chalice or bowl, making a linked chain and making a cast ring. The last quarter of the year, we will investigate glass casting, stained and fused glass. Students will be responsible for projects, quizzes, and short papers.

There is a lab fee of \$100 for this course.

Prerequisite: Art Foundations

VA83 Advanced Metals and Glass one credit

Advanced Metalsmithing is a continuation of building skills and learning techniques in metalworking. In the second year, students will investigate lapidary, advanced stone setting, hinge building, chain construction, metal clay, as well casting in glass and metal. An in-depth study of actual silversmithing will include the construction of spoons, large bowls and candlesticks. This will give students experience with larger metal work. Field trips to local studios, foundries and museums will help students create a fuller understanding of metal and jewelry design. The last quarter of the year, we will investigate glass casting, stained and fused glass. Students will be responsible for projects, quizzes, and short papers.

There is a lab fee of \$100 for this course.

Prerequisite: Metals and Glass

VA15 Sculpture and Materials one credit

Students will explore a broad array of form, content, techniques and concepts, that are used in creating three-dimensional objects and sculpture. Materials covered will be paper, fibers, stone, metal, glass, ceramics and recycled materials. Through looking at the world of sculpture and design, students will create 3D objects that reflect their place in a three-dimensional world. Areas to be covered will be additive and subtractive sculpture, bas relief, stone carving, mold making, sacred space and environmental sculpture. There will be a unit on Industrial Design and how we create art for a new digital world. Students will have the opportunity to explore a vast history of both sculpture and design in Philadelphia. In addition, they will analyze the creative process of sculptors currently working in the field.

There is a lab fee of \$100 for this course.

Prerequisite: Metals and Glass, Photography, Drawing and Painting 1, or permission of instructor

VA61 Portfolio Preparation (Semester 1) one-half credit

Portfolio Preparation is a semester long class for seniors. Students will identify conceptual, material, and technical themes prevalent in their artwork and complete a cohesive portfolio that they will present to colleges for review in National Portfolio Day in October. They will use this work for art school applications as well as supplemental material for university and college applications. The art service component of this course will enable students to apply their vast understanding of art to briefly working with others in the field, either teaching, running workshops, or curating an exhibition.

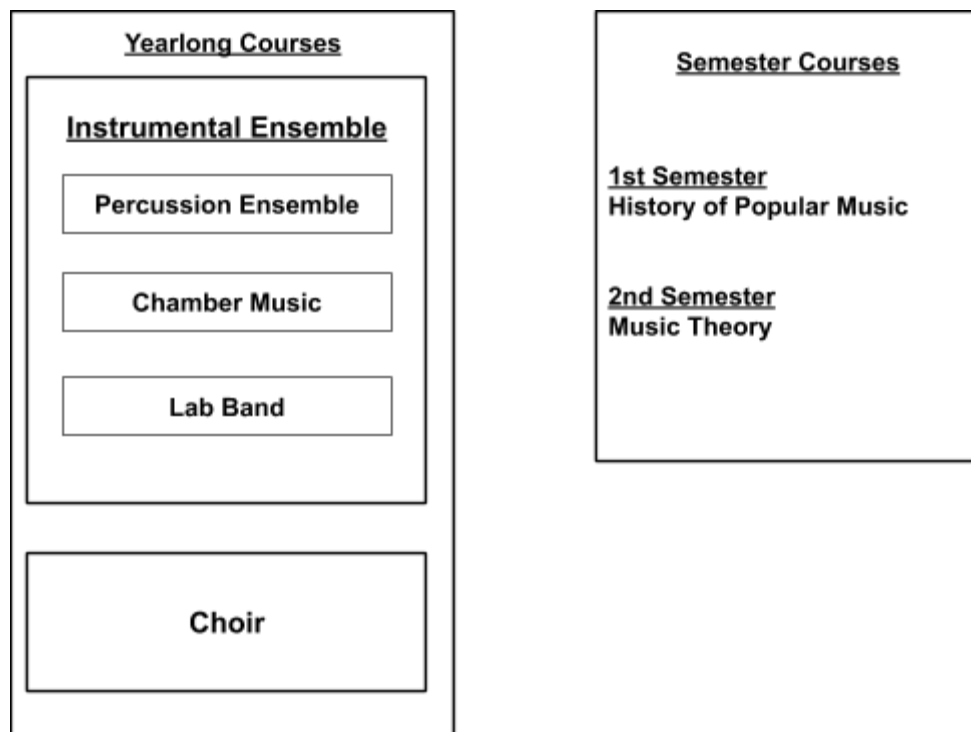
There is a lab fee of \$50 for this course.

Prerequisite: Seniors that have completed an advanced 2D or 3D level classes or approval by the department chair.

The Music Department

Courses in the music department foster active involvement of students as both skilled performers and active spectators. Students are taught about the language and history of their art form. Students develop as musicians through individual exploration and creativity and in group rehearsal across a wide variety of genres. With multiple performances throughout the year, pre-professional activities, and outside partnerships, work in the music department provides students with a rich base of experience to draw upon. Working as an ensemble, students develop skills, confidence, individual voices, and grit.

Music Department Course Sequence:



MU02 **Choir** **one credit**

The choir performs a wide variety of ensemble literature for the entire community. The class focuses on acquisition and refinement of choral skills including diction, articulation, dynamics and producing a beautiful tone. Emphasis on part-singing and ear training are also part of this class. In addition to providing concerts for the school community during the year, the choir performs locally when opportunities arise.

MU08 **Instrumental Ensemble** **one credit**

This group practices and performs a variety of musical pieces drawn from the traditions of classical, jazz, and popular music. Specific pieces are chosen based on students' individual musical proficiency and range of instruments in the group. Some prior instrumental experience is required. Major emphasis is on refining performance, where students develop and enhance their musicianship skills through focused repetition. Skills covered include technical facility, tone production, intonation, and expressiveness. In addition, students develop a knowledge and appreciation of the richness and complexity of music history and possibility through exposure to a diverse repertoire. Students enrolled in Instrumental Ensemble work as a full Ensemble 3 times per cycle, including a double block. Additionally, each student will choose a Small Ensemble from 3 different options, primarily based on instrumentation. The small ensemble choices are:

Percussion Ensemble (music written specifically for percussion instruments), *Chamber Music* (strings and winds focused), *Lab Band* (mix of rock, jazz, latin and other styles).

MU13**Small Ensemble****0.25 credit**

Students not enrolled in Ensemble who wish to participate in one of the Small Ensemble options may do so at the discretion of the Performing Arts Department and will be considered on a case by case basis. Enrollment in the Small Ensemble options may be capped. Choices are Percussion Ensemble, Chamber Orchestra, or Lab Band.

FALL SEMESTER**HE62****History of Popular Music (cross listed in History Dept.) one-half credit**

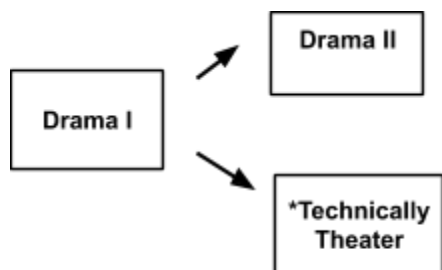
We will explore the development and history of American Popular Music through the lens of 4 different time periods and regions: Roots music in early 20th century New Orleans, the Great Migration in mid-century Chicago and New York; the Civil Rights Era in Detroit and Memphis, and the modern era in Los Angeles, Nashville, and New York. Academic readings, primary sources and listening will be part of this study as we examine historical and cultural influences, cross-pollination, and the evolution of new styles of music. No prior musical experience is required.

SPRING SEMESTER**MU03 Music Theory****one-half credit**

In this half-year course we will explore the foundations of Western tonal musical styles across a variety of genres. Students will study the elements of pitch, major and minor keys, intervals, chords, and functional harmony. Elements of rhythm, counterpoint, ear training, keyboard harmony and dictation/transcription will also be part of our study. Though this is an academic course, we will not lose sight of the fact that music is something that brings us joy. No prior musical experience is required, though basic familiarity with a keyboard would be highly beneficial.

The Drama Department

The mission of the Drama Department is to educate, entertain, inform and transform. Students engage in authentic project-based learning in a safe, supportive, yet challenging environment. They learn to take risks through the art of collaboration. Careful attention to process results in a product they can all be proud of. Curriculum changes yearly based on students' needs and interests. We also take advantage of Philly's vibrant theater community by attending live performances and hosting professional theater artists from throughout the city.



*Prerequisite of Drama 1 or Art Foundations

DR01 Drama I one credit

This course is designed for students who have an interest in the dramatic arts. No prior experience necessary. Curriculum changes yearly based on student experience/input. Students will gain a firm foundation in the basics of acting, stage terminology, playwriting and stagecraft. Above all, students will grow in confidence and collaboration. (No prerequisite)

DR02 Drama II one credit

This course is designed for experienced students who wish to deepen their study of drama. They will build on the principles already established in Drama I while pursuing more challenging projects both individually and as an ensemble. Curriculum changes yearly based on student experience and interest. First semester, students will refine their craft and create/perform original work (with special emphasis on preparing for the college audition). Second semester, the ensemble will choose a play to produce for the Upper School community, taking on the roles of director, costume designer, stage manager, etc. We will also examine the duality of show "business" and artistic intent by examining more modern works and the changing face of today's theater industry. (Prerequisite: Drama I and/or interview with Donna Romero)

DR03 Technically Theater one credit

This course is an introduction and exploration of the technical elements of theater production. Students will learn the role of stage technicians and their contribution to the overall aesthetic of dramatic productions. Students will be introduced to concepts of set design and building, basic woodshop, drafting and tool use, concepts of lighting and sound design, and division of labor while working collaboratively as a creative team. We will cover shop/theater safety, tool and equipment maintenance, how to read a script as a designer, and how to run a technical production meeting. Students will work individually and collaboratively on projects relating to specific productions and will have myriad opportunities for creative input and output. The majority of class time will be spent doing hands on projects. Grades will be determined by participation, projects, papers, quizzes and tests. (Prerequisite: Drama I or Art Foundations and/or interview with Max Budnick)

THE PHYSICAL EDUCATION DEPARTMENT

The upper school physical education program provides a sequential program of instruction for ninth through twelfth graders. The curriculum encourages the development of the student's understanding and appreciation of their physical being and an interest in participating in a lifetime of fitness activities. All students entering ninth or tenth grade are expected to pass a swim test or take a unit of instructional swimming in order to graduate. To show that students are safe in the water, they will be asked to jump into deep water, swim 100 yards (choice of stroke) and tread water/back float for three minutes. Tests are arranged during the fall of each school year. Students entering FSS in their eleventh or twelfth-grade years are welcome to take an instructional swim unit if they wish.

PE09 Ninth Grade PE one-half credit

The physical education curriculum for 9th graders is designed to focus on personal fitness awareness and to develop team-oriented skills. Units of instruction may include pre and post fitness testing, floor hockey, basketball, aqua games/instructional swim, general fitness, Pilates, speedball, and other large group games. Students' developmental success is assessed using a variety of tools. Students can expect to have their physical skills evaluated as well as their cognitive growth assessed.

PE10 Tenth Grade PE one-half credit

The physical education curriculum for 10th graders is designed to continue the development of individual and team-oriented skills. Electives include swimming, badminton, fitness, yoga, roller hockey, basketball, and team games. Students' developmental success is assessed using a variety of tools. Students can expect to have their physical skills evaluated as well as their cognitive growth assessed. Tenth-grade students will also have a quarter-long health unit. Among the topics included in this unit will be personal wellness, nutrition, stress management, drug/alcohol use, relationships, sexually transmitted infections, and consent.

PE11 Eleventh Grade PE one-half credit

PE12 Twelfth Grade PE one-half credit

The physical education curriculum for 11th and 12th graders is designed to provide a more advanced course of study which builds upon the skills and interests of the individual student. Electives include swimming, badminton, fitness, yoga, roller hockey, basketball, and team games. Students can expect to have their physical skills evaluated as well as their cognitive growth assessed. Eleventh graders take a CPR/AED/First Aid class while twelfth graders participate in an online health issues course. There is a \$46 fee for certification in CPR.

Physical Education Waiver Policy

Juniors and seniors are permitted to waive PE requirements if they participate in two after-school sports during the school year. This policy does not apply to students' health requirements, so participation in an after-school sport will not enable students to waive the health portion of their PE semester.

As part of the course selection process in the spring, juniors and seniors will sign up for each sport season, electing either PE or the "waiver" option. During the school year, there is a one-week "drop" period for sports. Students who elect to drop their sport, will enter a PE class and make up the missed work. Students injured while participating in a sport will remain on the team for the entire season (participating in ways that their physician permits), and will not enter PE.

This policy will not apply to students who serve as managers for after-school sports teams. The school recognizes the valuable contributions that managers make to both their teams and to the greater school community. Managers' responsibilities, however, do not encompass the physical activities that this policy recognizes. Also, many other students commit extended hours to co-curricular activities (e.g., Fine Arts productions, Student Government, the Yearbook, and so on) without anticipating a waiver of graduation requirements. It, therefore, would not be equitable to make such an exception for team managers.

ATHLETICS

For interested athletes, there are interscholastic sports after school during all three seasons of the school year. Boys are offered soccer and cross country in the fall; basketball, swimming, and squash in the winter; and baseball, tennis, and crew in the spring. Girls may choose soccer, field hockey, cross country, or tennis in the fall; basketball, swimming, or squash in the winter; and softball or crew in the spring. Friends Select is a member of the Friends Schools League and also competes with a wide variety of schools beyond the league. Varsity and junior varsity teams are available in each sport, depending on the number of participants.

NOTES
