



2019-2020  
**COURSE  
OF  
STUDY**  
UPPER SCHOOL

**FRIENDS SELECT**

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## Course Offerings 2019-2020

### General Academic Information

Graduation Requirements	2
Independent Studies/Explorations	4
2019-2020 Curriculum At a Glance	5

### Course Descriptions by Department

The English Department	6
The History Department	9
• Religious Thought	12
The Mathematics Department	13
The Science Department	16
The World Languages Department	19
The Visual Arts Department	24
The Music Department	27
The Drama Department	29
The Physical Education Department	30

### **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

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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><b>English - 4 credits</b> 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><b>History - 3 credits</b> History 9, 10 and 11 are required courses. The department also offers semester-long electives students may take in their junior or senior years.</p>
<p><b>Mathematics - 3 credits</b> Students take at least three years of mathematics, and must complete one year beyond Algebra 2.</p>	<p><b>Science - 3 credits</b> Physics (9th), Chemistry (10th) and Biology (11th) are required courses. The department also offers Advanced Level courses and a variety of electives.</p>
<p><b>World Languages - 2 credits</b> 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><b>Religious Thought - 1 credit</b> Ninth and tenth grade students take one semester of religious thought to fulfill this requirement.</p>
<p><b>The Arts - 2 credits</b> Students may take courses in the visual arts, music, or drama.</p>	<p><b>Physical Education - 2 credits</b> 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><b>Additional Electives - 4 credits</b></p>	<p><b>InterSession Participation in all grades</b></p>
<p><b>Senior Internship</b></p>	<p><b>Activity Requirement in all grades</b></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.

## **InterSession**

InterSession is a graduation requirement for all students every year they are enrolled during InterSession. As such, students are expected to fully engage in all five days of activities in order to receive credit. InterSession 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 InterSession 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 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 a service, or the manufacture of a product. Another is to explore potential career interests. During the internship, students begin to demonstrate an understanding of appropriate workplace behaviors and acquire a greater appreciation for the useful and meaningful work available in the city. 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. Students are required to give an oral presentation of their experience. Internships are evaluated on a pass/fail basis. 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 2019-2020 Curriculum

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

\*a total of 4 elective credits are required

\*\* Regular or Accelerated versions offered

# Course Descriptions by Department

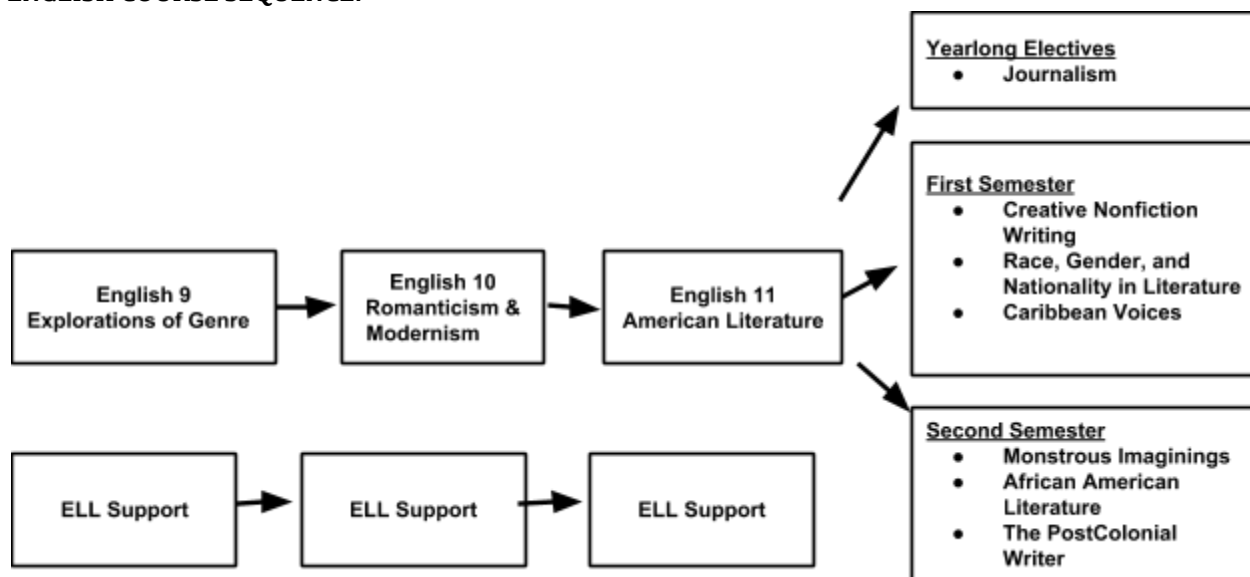
## **THE ENGLISH DEPARTMENT**

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 curricula are 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**

This course consists of an introduction to literature by means of an examination of genres: students study literature through an introduction to the formal features of fiction, drama, short story, 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 (*Romeo & Juliet*) and Greek tragedy (*Antigone*). We end the year with magical realism by reading the global novel *The Life of Pi*. 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 *Macbeth*, *Frankenstein*, *The Odyssey*, *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*, *All My Sons*, and *The House on Mango Street*. 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.

**ES09, 10, 11, 12 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. At the end of each year, students are required to take a 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, or 11, 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.

**Fall Semester**

**EE63                      Creative Nonfiction Writing                      one-half credit**

We will read as writers, identifying (and experimenting with) genre. Readings will be used to illustrate and inspire. In addition to writing creative essays, you will also produce focused writings--free of essayistic demand--as well as notebook responses. We will workshop each other's essays and share our exercises.

**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 *Homegoing*, *For Today I am a Boy*, *Flight* and a selection of poetry. Students will be writing a variety of analytic essays, 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 Jamaica Kincaid, Edwidge Danticat, Junot Diaz, V. S. Naipaul, and Derek Walcott to explore Haiti, the Dominican Republic, Trinidad and Tobago, 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. Cultural syncretism, the Indo-Caribbean and Afro-Caribbean identity, colonialism, immigration, Latino Caribbean identity, and the complex social and sexual politics at work in these texts are some of the topics we will explore. Students will respond to readings through analytic essays, personal writing, discussions, and presentations.

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

This is the stuff of nightmares, myths, and other legendary tales of horror: 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); *Dr. Jekyll and Mr. Hyde* (Stevenson); *I am Legend* (Matheson); *The Elephant Man*; and *Pan's Labyrinth*.

**EE66****African American Lit****one-half credit**

In this course, students will read several works from the rich tradition of African-American Literature. We will look at a variety of perspectives on being Black in America, exploring the diverse voices that have articulated the African American experience and impacted American culture as a whole. Texts may include *Passing*, *Beloved*, *Yellowman* and excerpts from the works of James Baldwin and Ta-Nehisi Coates. Students will be responding to each of the texts in a variety of modes, including analytic essays, presentations and personal writing.

**EE67****The Postcolonial Writer****one-half credit**

"The act of writing, it seems to me, makes up a shelter, allows space to what would otherwise be hidden, crossed out, mutilated. Sometimes writing can work toward a reparation, making a sheltering space for the mind. Yet it feeds off ruptures, tears in what might otherwise seem a seamless, oppressive fabric."

— Meena Alexander, *The Shock of Arrival: Reflections on Postcolonial Experience*

What is the role of the writer in the postcolonial world? How do postcolonial writers "feed off ruptures [and] tears" to make a "sheltering space" for the mind? Conversely, does a postcolonial author have an obligation to heal? This course explores answers to these questions through a focused study of contemporary fiction from the postcolonial world. We will read authors from South Asia, the Caribbean, and Africa. Texts may include *Purple Hibiscus* by Chimamanda Adichie, *A Bend in the River* by V. S. Naipaul, *Interpreter of Maladies* by Jhumpa Lahiri, and selections from *East, West* by Salman Rushdie. Critical readings by Edward Said and Franz Fanon will also be introduced. Students will respond to literature through analytic essays, personal writing, discussions, and presentations.

**Year-Long****EE62****Journalism****(yearlong) one credit**

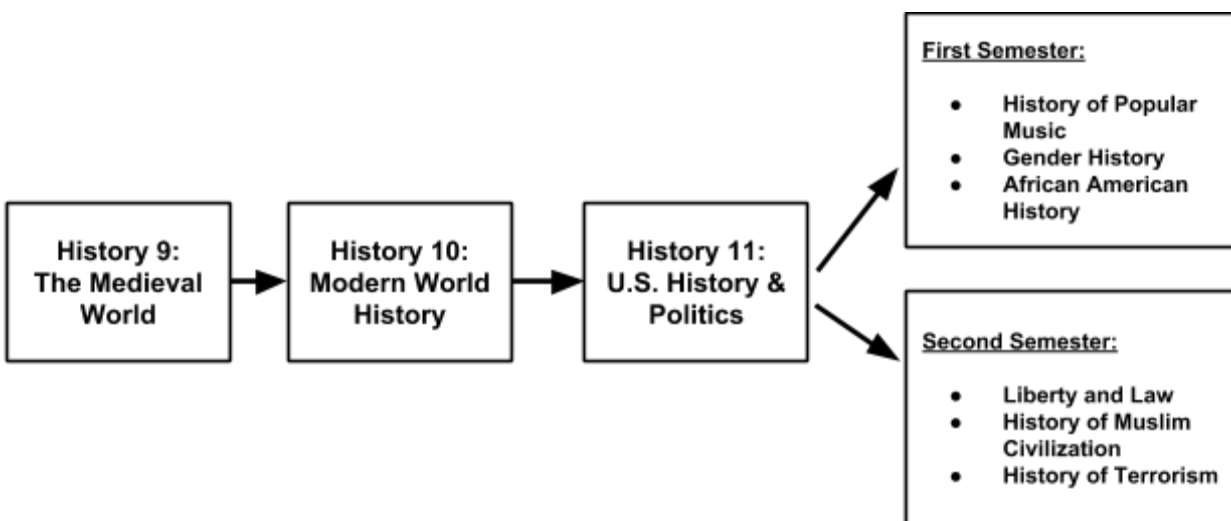
Through the study of the history of journalism in the United States, including how journalism has changed and the role of media in shaping it, students will come to an understanding of its role in the survival of democracy and the elements that go into substantial journalistic writing. Students will engage deeply with creating their own journalism in a variety of media as part of resuming/maintaining the long tradition of student journalism at Friends Select. If taking this course as a Visual Arts credit, Photography or Filmmaking are prerequisites.

# 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 and speaking, 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 in the senior year. 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 and India, for instance, are selected for exploration in the ninth and tenth grade years, and students examine American history 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 writing skills. The ninth-grade curriculum includes several research projects, including a research essay, and the presentation of a work of art at the Philadelphia Museum of Art. Students in tenth grade history write numerous historical arguments that challenge them to review, reflect on, and synthesize information from across multiple units to answer questions. In eleventh grade, students spend a full year researching and writing about a contemporary political issue for the Modern Issues Project and interview policymakers in Washington, D.C. as a component. These courses incorporate skills such as discovering and assessing primary and secondary sources, annotating readings, developing and outlining arguments, citing and paraphrasing sources, editing, creating web content, delivering oral presentations and more.

## History Course Sequence:



**H091 History 9: The Medieval World ninth grade one credit**

Throughout the year students use primary texts and a range of secondary sources to study the inhabited continents at periods within the years from 500 to 1500 C.E. Using the thematic lenses of government, religion, the arts, family and gender and commerce, the focus in recent years has included the Mesoamerican empires, medieval African kingdoms, the Tang dynasty of China, Islam, feudal Japan and aspects of medieval Europe and the Renaissance. 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 tenth grade one credit**

Why is today's world structured the way it is? Are our problems new? Are our solutions? This course will explore these fundamental questions as we examine major world transformations from multiple points of view. The course will begin with a unit that explores what the concept of world history means by looking at the earliest "world system" in the 13th century. From there, the course will examine major world events that shaped and re-shaped global patterns and systems into the world we have today. Topics, such as the Atlantic slave trade and the international civil rights movements of the long 1960s will be examined from multiple points of view, so as to study the ways global interactions produce both short and long term consequences for all parties involved. The course will end with units focusing on the economic, political, and environmental promises and challenges facing today's world.

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

This course surveys key eras in U.S. history from the 1770s through today. Throughout the year, students examine from different points of view the political, economic and cultural forces that have shaped people's perspectives on American history. Each unit is built around selected primary sources and historical commentaries that draw from the Gilder Lehrman collection as well as our school library's many databases, such as the New York Times Historic Collection to 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 spring semester, students write a major research paper on a modern American political issue of their choosing and also take part in the three-day Washington research trip, which combines research and interviews with public officials in Washington, D.C.

## **Twelfth Grade History Electives**

### **Fall Semester**

**HE71 African American History one-half credit**

This course serves as an introduction to African American history, primarily through the medium of autobiographical eyewitness accounts, spanning a period of 300 years, from the Middle Passage to the Million Man March and beyond. Emphasis is on two interrelated themes: the internal history of the black community, its origins, its development and growth, its triumphs and tribulations in America, and the ways in which race, class, ethnicity, and gender influence the African American community as both producer and collaborator in matters of race, gender, social justice, and culture. Skills targeted in this course: enhanced literary analysis, nonfiction writing and critical thinking.

**HE70 Gender History one-half credit**

This course seeks to explore foundational questions about gender in the modern era such as: *What is gender? To what extent is gender a social construct? How have concepts of gender changed over time? How do race and class intersect with gender, and how have these hierarchies been used to support or challenge power dynamics?* Each unit will begin with theoretical readings, which students will then apply and test against historical case studies. In addition to the case studies the class examines collectively, students will be expected to conduct individual research and contribute their findings to class discussions. One explicit goal of this course is that students leave confident that they can do independent research in college.

**HE62                      History of Popular Music (cross listed in Music 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**

**HE53                      Liberty and the Law    one-half credit**

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.

**HE68                      Introduction to the History of Muslim Civilization                      one-half credit**

This course will serve as an introduction to, and survey of, the religious, literary, artistic and scientific traditions that constituted Islamic civilization from the 7th century CE until the 19th Century and the contemporary tensions and transformations which have emerged in the modern era. Course goals include familiarity with the broad outline of Islamic history from Arabia in late antiquity to the modern period, familiarity with the beliefs, practices, sacred literature and community of Islam, in-depth knowledge of how the Qur'an and Islamic tradition (hadith) work to shape Muslim views on a variety of topics, and greater commitment to thinking clearly about important human beliefs and the texts that embody them. We will also work to improve global awareness through examining primary sources and through critical analysis of preconceived notions about unfamiliar cultures and contemporary issues such as jihad, progressive Islam, feminism, and human rights. We will meet these goals through classroom readings and discussions, readings from Qur'an and hadith, projects with oral components designed to sharpen Qur'an reading skills or introduce us to specific issues in Islamic history, and a structured research project and presentation.

**HE73                      History of Terrorism    one-half credit**

Terrorism is often in the news, but how much do we know about it? *What is terrorism? How is it different from other forms of violence and other forms of political violence? Is terrorism on the rise? How has the nature of terrorism changed over time? In what ways does terrorism intersect with race and gender? As violent and divisive as terrorism is, in what ways has it made our world feel smaller?* These are some of the questions we will examine in this course. The course will rely heavily on academic readings for our historical and theoretical foundations, while primary sources will come from a variety of media. Students will have the opportunity to research and present on a number of self-selected topics. One explicit goal of this course is that students leave confident that they can do independent research in college.

# 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**

In the tenth-grade Religious Thought course, students examine religious and ethical responses to contemporary issues as well as their own beliefs and how they put those beliefs into action. Among the readings are Eboo Patel's *Acts of Faith*, Elie Wiesel's *Night*, and selections of the writings of Martin Luther King and *The Courage of Conviction*. The 10<sup>th</sup> grade class will also visit the United States Holocaust Memorial Museum as part of its examination of spiritual resilience. Regular reflective writing assignments culminate with a spiritual autobiography or a "belief into action" essay.

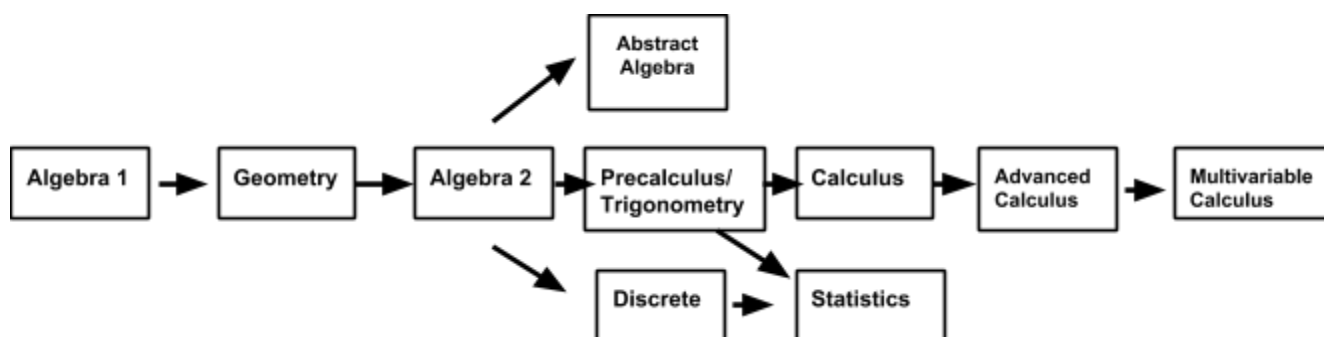
# THE MATHEMATICS DEPARTMENT

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 (polynomial, 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.

<b>M101</b>	<b>Geometry</b>	<b>one credit</b>
<b>M102</b>	<b>Accelerated Geometry</b>	<b>one credit</b>

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. Accelerated Geometry stresses depth of coverage of applications, problems, and proofs. Strong Algebra I skills and a desire to be challenged are required, therefore, as well as the ability to work independently, creatively, and with genuine interest on difficult problems.

<b>M921</b>	<b>Algebra II</b>	<b>one credit</b>
<b>M922</b>	<b>Accelerated Algebra II</b>	<b>one credit</b>

Algebra II develops algebraic and geometric skills as a 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.

<b>M111</b>	<b>Precalculus and Trigonometry</b>	<b>one credit</b>
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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.

<b>M129</b>	<b>Discrete Mathematics</b>	<b>one credit</b>
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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.

<b>M117</b>	<b>Statistics</b>	<b>one credit</b>
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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**

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)

**M142                      Abstract Algebra    one credit**

Abstract algebra broadly studies the structure of algebraic systems, such as the commutativity and reversibility of algebraic operations. The curriculum includes: cyclic groups (modular arithmetic), symmetries of polygons, permutation groups, quotients, and the functions that can exist between groups. Students will learn to write mathematical proofs using several different methods. Prerequisite: Successful completion of Algebra 2.

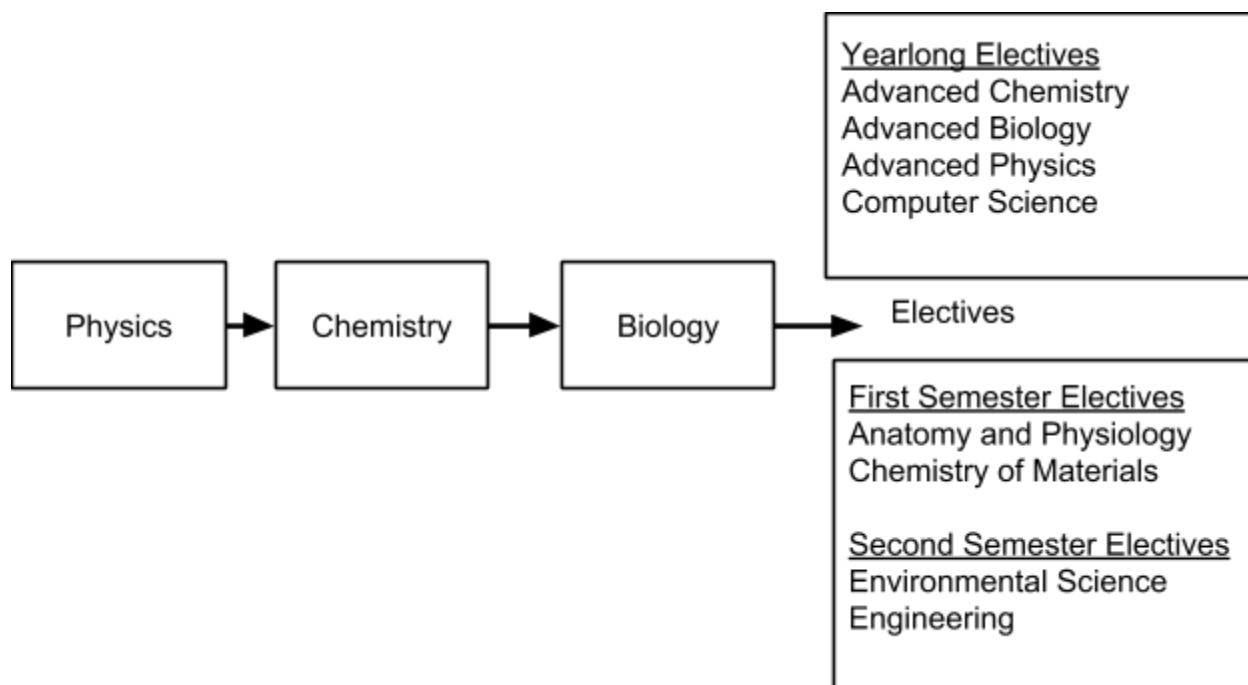
**M139                      Multivariable Calculus    one credit**

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 Rodin's Thinker to learn about its 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.

**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. 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.

## **Science Electives**

### **Fall Semester**

#### **S131                      Anatomy and Physiology                      one-half credit**

In this first-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.

#### **S133                      Chemistry of Materials                      one-half credit**

This first-semester course explores the science behind our perception and preparation of various artistic media. We'll look at how artists have used chemistry to develop and manipulate new tools and materials, and at how the chemical changes and interactions that take place dictate how a specific medium is used. The course will include many hands-on opportunities to synthesize your own dyes and painting media, as well as modeling the atomic behavior of solid art media such as glass, ceramics, and metals. Other topics covered include color, photography, and art restoration.

### **Spring Semester**

#### **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.

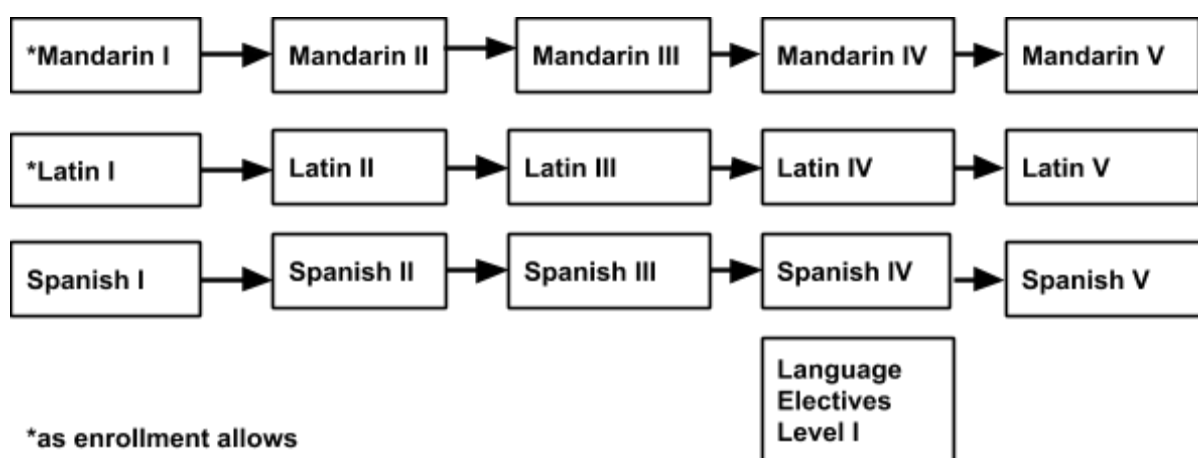
#### **S126                      Environmental Science                      one-half credit**

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 language 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 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, 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.

**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.

**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 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: Imperialism and Nationalism                      one credit**

In Latin IV, students will focus on the topics of imperialism and nationalism, particularly 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 plays a role in furthering nationalist policies.

**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.

**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.

**LM70                      Advanced Mandarin for Native Speakers                      one credit**

This course for native speakers is conducted primarily in Mandarin. Authentic materials are used to continue to deepen the students' understanding and awareness of current historical events, social, economic, and environmental issues and challenges that face modern China. Topics include gender identity, environmental concerns, education reform, and changing attitudes among the different generations of Chinese society. Emphasis is given to the challenge of retaining traditional culture in China's modern society. News articles are used to spark debate and dialogue within the class. Students create projects where they will share their knowledge and make comparisons between American culture and that of China.

**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 using the present, past, and future tenses. 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 is a seminar that prepares the 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 allow primarily juniors and seniors 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. (Please indicate a 2nd choice on your course selection sign-up form.)

For the 2019-2020 academic year, the following electives are offered as options and will run as determined by interest.

**LF10                      French I                      one credit**

This introductory course introduces students to practical French 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. The course is taught using a text and workbook series. Learning is supplemented with authentic materials including audio, film, video, and level-appropriate readings. Students may also read short novels as a way to further reinforce their comprehension, speaking, and writing abilities.



**L110****Italian I****one credit**

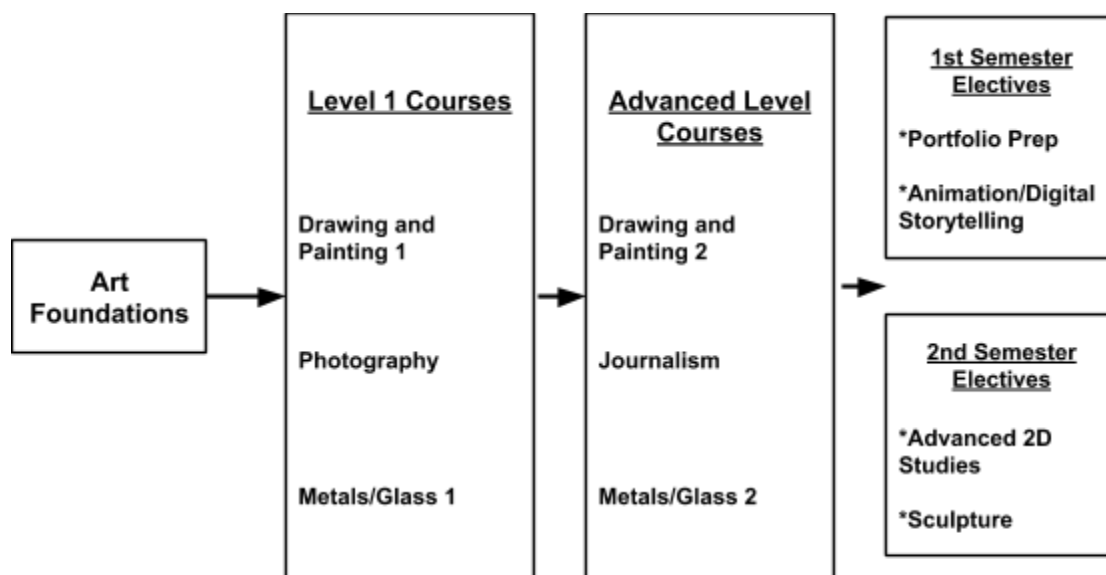
This course introduces students to practical Italian vocabulary for use in real-life, everyday situations. Students learn elementary structures that allow them to understand and express themselves in both speaking and writing as they build a solid foundation in the language. Class time is largely dedicated 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. The course is taught using a text and workbook series. 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:



\*Check Prerequisites in  
course descriptions

### VA10 Art Foundations

one credit

Art Foundations is a prerequisite to all other visual arts courses. This class provides students with the tools and understanding of media used in two and three-dimensional art. Students are introduced to the basic elements of drawing, painting, printmaking, sculpture, and digital media. Key concepts include line, shape, texture, value, and color. Students alternate between working from observation and creating more conceptual and design-based projects. The class will teach students to recognize and work with the visual language of art and design. There is a lab fee of \$50 for this class.

**VA30                      Drawing and Painting I                      one credit**

In Drawing and Painting I, students combine their creative ideas with technical exercises to become proficient in composing two-dimensional imagery. Students work with an array of drawing and painting materials while exploring line, shape, composition, tone, and perspective. Projects range from direct observational studies to imaginative sketches and collage. Prerequisite for this class is Art Foundations. There is a lab fee of \$50 for this class.

**VA35                      Drawing and Painting II                      one credit**

Drawing and Painting II will offer students an opportunity to continue to develop their artistic voice through their exploration of image making. The class will look at different types of two-dimensional design, painting, illustration, narrative art, collage, and mixed media art. Students will have the opportunity to work on large paintings. Prerequisite: Drawing and Painting I and permission of instructor.. There is a lab fee of \$50 for this class.

**VA85                      Advanced 2D Studies                      one-half credit**

Advanced 2D Studies is a semester-long course that will offer students an opportunity to explore advanced image making in painting, drawing, printmaking, and mixed media. With guidance and through self-devised projects, students will investigate further materials, techniques, content, and ideas that have captured their interest. Through these in-depth studies, students will continue to find even broader ways to express their ideas artistically. Drawing and Painting II is a prerequisite for this course. There is a \$50 lab fee for this class.

**VA40                      Photography                      one credit**

This course will instruct students on the practical use of digital cameras and photo editing software. Emphasis will be placed on photography's limitless potential for personal expression. At the same time, students will explore the history of photography, photography as art, the social implications of photography, and how photography impacts many other fields of study. Students will be given bi-weekly photo assignments. Some of these assignments will be completed outside of class. During the double-period, we will take short outings into the city to photograph, and visit nearby museums and galleries. We will also use class time for student-work critiques, and student presentations of established photographers' work. Foundations is a prerequisite for this course. There is a lab fee of \$100 for this class.

**VA86                      Animation and Digital Storytelling                      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. In addition to traditional hand-drawn animation, students may employ photography, storyboards, recorded sound, silly puppets, digital painting, editing software, and other modalities to get 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, screenplay writing, 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, Photo, or Metals 1.

**EE62                      Journalism (cross listed with English Dept.)                      one credit**

Through the study of the history of journalism in the United States, including how journalism has changed and the role of media in shaping it, students will come to an understanding of its role in the survival of democracy and the elements that go into substantial journalistic writing. Students will engage deeply with creating their own journalism in a variety of media as part of resuming/maintaining the long tradition of student journalism at Friends Select. If taking this course as a Visual Arts credit, Photography or Filmmaking are prerequisites.

**VA81                      Metalsmithing/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. Art Foundations is a prerequisite for this course. There is a lab fee of \$100 for this course.

**VA83                      Advanced Metals/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. Metals/Glass is a prerequisite for this course. There is a lab fee of \$100 for this course.

**VA15                      Sculpture                      Spring Semester                      one-half 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 world 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. Students will have the opportunity to explore the vast collection of public sculpture in Philadelphia. In addition, they will analyze the creative process of sculptors currently working in the field. Art Foundations is a prerequisite for this course. There will be a \$50 lab fee for materials.

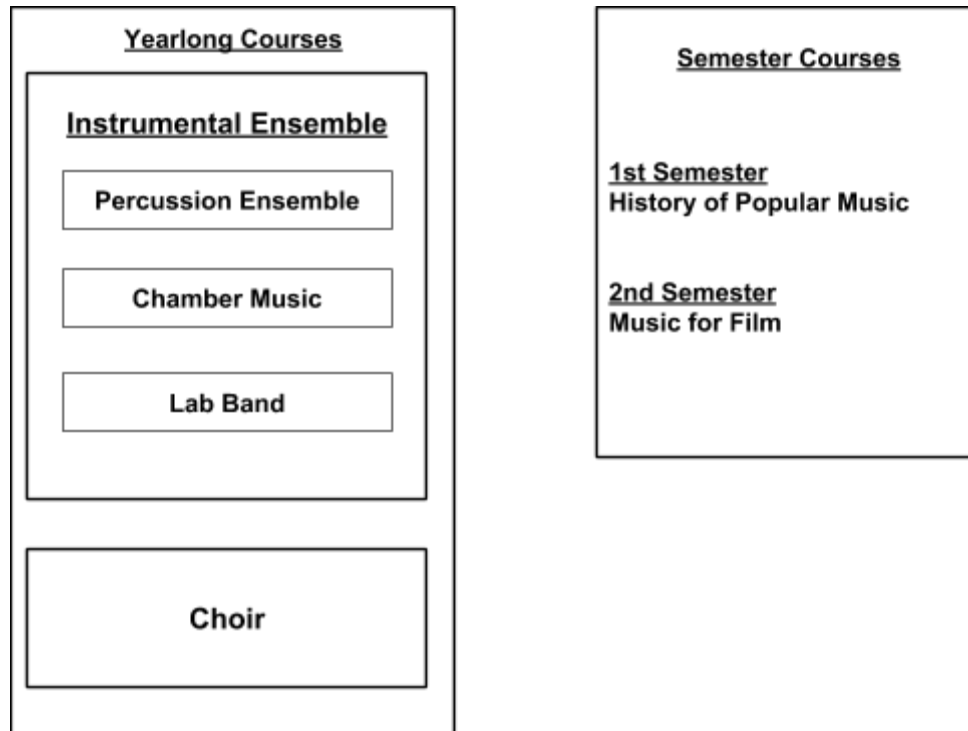
**VA61                      Portfolio Preparation                      Fall Semester                      one-half credit**

Portfolio Preparation is a semester long class for seniors that will run much like an independent study. Students will create a cohesive body of work that they will present to colleges for review in National Portfolio Day in October. They will create a portfolio with which they will apply to art schools and/or use as supplemental material for university and colleges applications. Prerequisite: seniors that have completed an advanced 2D or 3D level class or approval by the instructor along with the department chair. There will be a \$50 lab fee for materials.

# 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 experiences 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.

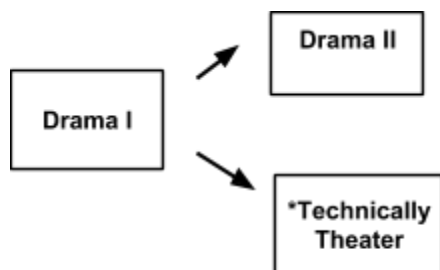
**SPRING SEMESTER**

**MU15                      Music for Film                      one-half credit**

This half-year survey and lab course will cover historical and modern concepts of how film music works - and why. We will study major composers including John Williams, Hans Zimmer, and John Carpenter, as well as notable composer-director partnerships and a wide variety of scoring techniques. Lab work will be part of our study, which will allow students to explore sound and image and the relationship between the two. We will be using various sound sequencers to create and arrange music with various footage. Materials will be drawn from many cultures to present a global perspective. No prior musical experience is required.

# 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. Students will gain a firm foundation in basic stage terminology, acting techniques, theatre history (from the Ancient Greeks to the present), playwriting, and design. 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. 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 Technical Director)

# 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.

## **PE09**

### **Ninth Grade PE**

**one-half credit**

The physical education curriculum for 9<sup>th</sup> graders is designed to focus on personal fitness awareness and to develop team-oriented skills. Students are instructed in the following units: 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 10<sup>th</sup> graders is designed to continuing the development of individual and team-oriented skills. Students are instructed in the following units: pre and post fitness testing, aqua fitness/instructional swim, badminton, muscular strength and conditioning, and cooperative 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 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 11<sup>th</sup> and 12<sup>th</sup> graders is designed to provide a more advanced course of study which builds upon the skills and interest of the individual student. Students participate in the following units: rollerblading, recreational games, strength and conditioning, CPR and online health issues. Students can expect to have their physical skills evaluated as well as their cognitive growth assessed. There is a \$30 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. In addition, 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**