

Upper School

COURSE OFFERINGS

2011-2012

FRIENDS SELECT

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INTRODUCTION

The upper school's college preparatory curriculum is designed to prepare students for success in college and beyond. In the program, students find curricular incentives and supports that include advanced courses, interdisciplinary humanities sequences in the ninth and tenth grades, developmentally appropriate course sequencing, and electives in each academic department. The school's commitment to community service, experiential outreach, and globalism, all grounded in Quaker principles, is embodied in the ninth- and tenth-grade service projects, the senior internship, the class commitment to follow a cause through high school around community service, and exchange opportunities.

GRADUATION REQUIREMENTS

Each student in upper school must earn at least 24 credits. Freshmen and sophomores must take a minimum of 6 credits each year (including 5 Majors). Juniors and Seniors must take a minimum of 5.5 credits each year. A student must obtain the approval of the Director of Upper School, in order to take more than five major courses. The Director of Upper School will approve requests to take fewer than five major courses and no more than 6.5 credits only in special circumstances. Departmental graduation requirements are as follows:

4 credits of English, including IDS-9, IDS-10, English 11, and senior electives

3 credits of History, including IDS-9, IDS-10, and United States History

3 credits of Mathematics, including one year of math beyond Geometry and Algebra II (Algebra I is a prerequisite for the program)

3 credits of Science, including laboratory chemistry and biology courses

2 credits of the same World Language, taken consecutively during grades 9 through 12, up through and including level 3

1 credit in Religious Thought, consisting of 2 half-credit courses taken in grades 9 and 10

2 credits of Physical Education, including swimming proficiency or course completion

1 credit of Fine Art, including .5 credit in visual arts and .5 credit in performing arts

or

1.5 credits of Fine Art, in either visual arts or performing arts

4 additional elective credits

Activity Requirement in all grades

Senior Internship/Independent Project

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.

Activities Requirement

Extracurricular activities provide opportunities for students to develop leadership, new skills and talents; and, to learn the value of teamwork and cooperation. Freshmen and Sophomores 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. Juniors and Seniors are required to participate in at least one season of after-school athletics, one drama production (performance or stage & tech), or to serve in one of the following capacities: Student Government President, vice president, and Class President, Yearbook Editor, *Cauldron* Editor, Mock Trial team member, Peer Tutor, or (at the discretion of the club advisor) Club Leader. A sample of the student organizations available during 2010-2011 includes: Worship and Ministry, Thespian Troupe, Black Student Union, Composers' forum, and Sexuality and Gender Alliance.

Summer Reading Requirement

Because Friends Select encourages students to develop reading as a lifelong habit, a program of summer reading is required. In grades 7-12 students are asked to read both a common reading book and added pair over the summer. Each student chooses one pair chosen by various faculty and staff members. All students and faculty in grades 7-12 also read a common book. In the fall, reflection on each pair and the common book is provided through un-graded discussion seminars scheduled during the school day and or a special assembly. These readings are subsequently integrated into the curriculum in various ways.

Junior Internship Option

The Junior Internship is an optional opportunity for students to pursue placements during Spring Break of Junior year, the subsequent summer break, or after school during Senior year. Students spend time 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. A student's completion of this optional internship appears as part of her or his school record.

Senior Internship/Independent Project

The Senior Internship/Independent 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 senior internship program provides many of the same benefits as the Junior Internship option. 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-sponsored internship, 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. 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. 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 and yearbook ceremonies, 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.

Independent Study

Independent study with an instructor may be possible for a junior or senior with special interest and talent in a particular subject area. Courses or study projects can take place either on- or off-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 process, the student must discuss the proposal with the upper school director and the appropriate department chair. Students must propose yearlong and first semester independent studies by the preceding April. Students must propose second semester independent studies by the preceding November.

STUDENT SUPPORT SYSTEMS AND PERSONNEL

Director of Upper School

The upper school director, with the help of the department chairs, oversees personnel and the academic program. The director guides individual teachers and departments in the creation and review of the upper school curriculum. The director also approves students' academic schedules.

Assistant Director of Upper School and Dean of Student

The assistant director of upper school and dean of students supervises the advisory system and arranges, conducts, and follows up on conferences with students, families, and teachers. The assistant director is available to support students and families as they work to define and resolve any difficulties that may arise. She also oversees extracurricular activities, special programs, discipline, and other aspects of student life.

Grade Dean

Each upper school grade is assigned a faculty member to act as grade dean. The grade dean reads all grade reports, gets to know each student, and makes recommendations concerning students' academic programs and disciplinary procedures. In addition, the grade dean coordinates extracurricular activities within the grade and works closely with the student class officers and parent volunteers.

Advisor

Each student in the upper school chooses or is assigned an advisor. The student meets with his or her advisor during an advisory period each week, and during the year each student has the opportunity to have individual conferences with the advisor to discuss academic and social concerns. The relationship is considered a private one and, except in serious situations, faculty members do not normally divulge personal information unless authorized by the student. Advisors are generally included in parent/teacher conferences.

School Counselor

At the request of the dean, guidance and counseling issues are reviewed by the school counselor, who is available to meet with families and school personnel.

Learning Specialist

The learning specialist provides support to students and faculty in the area of learning differences and disabilities. The learning specialist performs classroom observations, consults with teachers, helps students develop compensatory strategies, and assists in implementing necessary accommodations for students with documented learning disabilities.

English as a Second Language

In the middle and upper schools, students who are not native speakers of English are placed in an appropriate level of instruction in the English as a Second Language program. Students are assessed at the beginning of the school year and assigned to an appropriate learning group. These small, individualized classes meet regularly to work on vocabulary development, grammar, conversation, literature and written expression; the coursework draws on the content of students' other classes.

THE ENGLISH DEPARTMENT

The English department's mission is to promote facility with the English language and students' appreciation of the rich traditions of English literature. The goal is to provide each student with a strong literary background by teaching first-rate literature, to encourage proficiency in communication through a rigorous, sequenced program of writing and presentation, and to foster critical thinking. The syllabi reflect the attempt to integrate time, value, history and theme. Core courses and electives are skills-oriented and directed toward stimulating independent learning responsive to collective needs and intellectual goals.

The English department curricula are richly diverse and firmly grounded in basic skills. Skill development in reading, writing, listening, speaking, discussing, and vocabulary-building is stressed at every instructional level along with close reading and study of representative 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 juniors whose schedules permit their taking a second English course in the junior year. Departmental electives may be designed around a genre, a theme, an historical period, or around a distinct author. Seniors and juniors have the option of taking two English electives concurrently for a double English major. Independent study with an instructor can sometimes be arranged for a student with special interest and talent in English.

E091 Interdisciplinary Sequence-9 one credit ninth grade

The ninth-grade component of the three-year interdisciplinary sequence brings the Middle School humanities curriculum into the Upper School. The 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, poetry, and memoir. Lead texts in the first semester are selected to provide clear examples of fiction and autobiography. Readings include such works as *The Catcher in the Rye* and *I Know Why the Caged Bird Sings*. Most lead texts in the second semester complement the history component of IDS-9. Texts include *Beowulf*, *Romeo and Juliet*, and excerpts from *The Canterbury Tales*. The ninth-grade skills sequence extends the eighth-grade emphasis on grammar, mechanics, and paragraphing to include more ambitious compositions such as analytical, narrative, and comparison/contrast essays as well as various creative writings. Students will work to develop original thesis statements, which they learn to support with textual evidence and critical analysis. A series of museum visits and a "museum night" at the Philadelphia Museum of Art, when each student gives a public presentation, complement the curriculum.

E101 Interdisciplinary Sequence-10 one credit tenth grade

IDS-10, the culmination of the three-year interdisciplinary sequence, begins with a look back at the Renaissance studied in ninth grade and then a look forward to intellectual movements that challenged that traditional world. The study of *Macbeth*, a warrior who challenged the order of his world, serves as a starting point for exploration of movements that include Romanticism and Modernism. Readings cover a wide range of literature, and may include such additional texts as *Frankenstein*, *Great Expectations*, *Waiting for Godot*, *Master Harold and the Boys*, *Mrs. Dalloway*, short fiction by authors such as Conrad, and Romantic and Modernist poetry. Yearlong reading goals consist of honing students' close reading skills and their ability to perform literary analysis through examination of plot 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 use of textual evidence for support.

E111

English 11

one credit

eleventh grade

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*, *Slaughterhouse 5*, *The Narrative of the Life of Frederick Douglass*, and *A Streetcar Named Desire*. Supplementary reading will include a range of short stories, poems, and essays by such writers as Edgar Allan Poe, Langston Hughes, Raymond Carver, and Charlotte Perkins Gilman. 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. Students will learn to augment their critical reading and writing skills by utilizing literary criticism as support in their essays and discussions

English as a Second Language (ESL)

one credit

ninth-twelfth grade

ESL is a mandatory full-credit course for all non-native English-speaking students who have not yet achieved communicative competence in reading, writing, listening and speaking in English. This three-year, sheltered program includes ESL I, II, and III, and these courses fulfill the students' English requirements. Placement into ESL sections is based on a student's proficiency with English and the discretion of the ESL and English department faculty. ESL classes are small, usually between three and five students, so students get the individual attention they need in order to build solid foundations in English. ESL classes are structured with two important aims in mind: to give explicit instruction in ESL content and to teach academic reading and writing intensively in order to support ESL students in their core classes. Teaching materials will include representative literature, short stories, poetry and essays, some of which will come from the English curriculum, as well as other appropriate materials selected by the ESL and English faculties. In addition, students will use materials specifically targeted to English as a second language learners. The ESL course uses a content-based language instruction approach.

English 12

one credit

twelfth grade

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.

Eleventh and Twelfth Grade English Electives (one-half credit each):

First Semester

EE19

Shakespeare I

This course will serve as an introduction to the major works of the greatest writer in the English tradition. Students read five plays (a history, two tragedies, a comedy, and a romance) as well as examine some of the sonnets. Special attention is paid to Shakespeare's dramatic sense, his use of figurative language, and to the poetry of his blank verse. Students are introduced to some of the vast body of Shakespearean criticism written over the past 500 years.

EE54 World Literature: Central South America

The focus of the World Literature class matches the Intersession region for each particular year, and so rotates through the Middle East, Central/South America, Africa, and Asia. For each region, students read literature from both contemporary writers and major canonical figures from multiple genres. Because literature so powerfully conveys human experience, the works studied in this course include a variety of literary perspectives (gender, race, class, culture, religion, etc.). Critical thinking is emphasized both in class discussion and in analytical writing, and students are encouraged to draw upon their understanding of American and British literatures, as well as upon all relevant knowledge gleaned from other disciplines, to inform their experiences with the works of the course.

EE12 The Power of Memory: The Art of Memoir Reading and Writing

How do memories shape our lives? Memoir is the literary representation of the interior life; it is a form at times reflective and at times self-indulgent. Students read several twentieth century memoirs, such as *Angela's Ashes*, *A Heartbreaking Work of Staggering Genius*, and *The Basketball Diaries*, as well as selected essays and poetry. Students write short memoirs connected to the texts and focusing on the development of a personal voice and on the ways in which reality is siphoned through memory.

Second Semester

EE31 Irish Literature

Ireland has produced remarkable storytellers since ancient times. This class surveys Irish literature (tales, poetry, fiction, drama) from Celtic times to the twentieth century. We will read ancient myths; Celtic, monastic, and medieval poetry; and major modern writers including Yeats, Joyce, Synge, O'Casey, and Heaney. Students spend some time investigating the complex, dramatic course of Irish history in order to provide a context for the reading.

EE48 American Road Trip

The country is big, lots of people have cars, and until recently, gas was cheap. There is a literary (as well as an actual) tradition of hitting the road (especially in an East to West direction), absorbing the landscape, having adventures and in the process coming to a more developed understanding of oneself. In this elective, students read several Road Trip novels, starting with Mark Twain and including writers such as Jack Kerouac, John Steinbeck, Mona Simpson, some creative nonfiction (Woody Guthrie), and view selected Road Trip movies such as *Thelma and Louise* and *Bonnie and Clyde*. All these works help define the lure of the road trip as a metaphor for life and its yearnings. Students will write analytic papers, reviews, and be responsible for presentations.

EE52 Media Studies

Media studies focuses on three overlapping areas in an attempt to make students savvy producers and consumers of media. The first area of study is journalism: students learn to recognize and follow sound journalistic practices, and will write news and feature stories. In the second area of the course, technology, students publish their writing in the multiple formats of today's media, including but not limited to web pages, audio/video podcasts, and blogs. In the third area of the course, students continue to produce writing while learning media literacy, which involves examining the history and methods of today's mass media culture in order to comprehend their nearly incessant exposure to media. Throughout the course, students explore issues in the school and citywide communities to produce original, interesting work for the school's multimedia publication, *The Falcon*. A student may take the course only once.

THE HISTORY DEPARTMENT

The main focus of the history department is to guide students towards a better understanding of our world, its past, and the different peoples within it. The department emphasizes the skills of careful reading and analysis, thoughtful writing and speaking, and respectful listening. History courses are required in ninth, tenth, and eleventh grades. The department offers semester electives in the senior year.

The core courses provide a foundation for understanding Western civilization as well as its relation to traditional cultures. Periods of history in China, Japan, and India, for instance, are selected for exploration in the ninth and tenth grade years. The department also hopes that each course of study will engender sensitivity to differing ways of living and awareness of creative possibilities for a better world. Electives offer area studies and topics in the social sciences. All courses are designed for students' wide range of interests.

A major feature of the history program is sequential research. Each of the required courses focuses on skills which are developed throughout the first year of the history sequence. The ninth-grade IDS curriculum includes several research projects, including a Japan research project, a research essay, and a presentation of a work of art at the Philadelphia Museum of Art. Appropriate citation techniques are taught at this level. Subsequent research includes the tenth-grade research essay in the fall, a research essay in eleventh grade, and the eleventh-grade Washington Research Project. These projects incorporate skills such as discovering and assessing resources and analyzing historical information. The curriculum emphasizes the use of computer databases and the development of oral presentation skills.

H091	Interdisciplinary Sequence-9	one credit	ninth grade
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The ninth-grade component of the three-year interdisciplinary sequence (or IDS) brings the middle school humanities curriculum into the upper school. IDS-9 begins by looking at the Tang, Sung, and Yuan dynasties in China for the first quarter of the year and traditional Japan in the second quarter. This investigation into East Asia provides a strong contrast to the examination of the West in Islam and Europe in the second semester. IDS-9 employs a selection of thematic lenses (religion, government, art and architecture, family and gender, cultural interchange) to accomplish its mission. Lead history texts include short fiction from China and Japan, poetry of Li Bai and Basho, selections from the *Qur'an*, "The Life of St. Catherine of Genoa," and selections from *Eric and Enide*. Five class visits to the Philadelphia Museum of Art culminate in an evening when each student gives his or her own public presentation of a work. The ninth-grade skills sequence extends the eighth-grade emphases on usage, mechanics, and paragraphing to include more ambitious compositional strategies (the multi-paragraph essay) and a research essay.

H101	Interdisciplinary Sequence-10	one credit	tenth grade
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IDS-10, the continuation of the three-year interdisciplinary sequence, commences with the Reformation in Europe and traces the various revolutions—political, social, economic, and intellectual—that unseated the traditional world explored in ninth grade. The third quarter of IDS-10 features a study of nineteenth-century Africa and India, including George Orwell's *Burmese Days*, and the European penetration into these regions. Using short philosophical and political essays and examples of art and music, this course examines the foundations of Western society. Classroom work is augmented by trips to study art and architecture and one trip to an opera. A research essay is required in the first semester, and a research project, combining research and debates investigating certain aspects of Philadelphia, occurs in the spring semester.

H111	United States History	one credit	eleventh grade
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This course surveys key events in U.S. history from English colonization to 1989, including the Founding, the Civil War, industrialization, civil rights movements, the Great Depression, and the Cold War. A wide variety of primary sources and historical commentaries are used to encourage students to explore a number of approaches to these issues and to refine their own analytical skills. In addition, students will read *The Narrative life of Frederick Douglass*. In the spring semester, students write a major research essay and present their findings to the school community. In May there is a Washington Research Project, which combines research, interviews with public officials in Washington, D.C., and culminates in debates at school.

Twelfth Grade History Electives (one-half credit each)

First Semester

HE51 The Civil Rights Era

This course is an examination of color relations in the United States from the colonial period up to and including the modern Civil Rights Movement from the 1950s through the 1970s. Students look at relationships between Blacks and Whites, the role of local and Federal governments, and the role of labor, religion, and sports, as we track the events, people, and decisions that affected how Blacks were treated and thought of by mainstream America. There are readings from books, essays, videos, interviews, and surveys. There will also be essay assignments, response assignments, and tests, and a research project associated with some aspect of the Civil Rights Movement

HE50 Comparative Government

This course introduces students to the concepts and methods used in comparing the world's political systems. Students study three countries—Great Britain, Egypt, and Mexico—learning about topics including their political cultures, economic and belief systems, political institutions, social cleavages, economic and political changes, and historical and modern policy issues. Throughout the course, students are continuously comparing the countries across these content areas, as well as considering the impact of broader factors such as globalization. Typical class activities include world news updates, seminar-style class discussions, short oral and visual presentations, and writing. In addition to textbook readings and daily news from around the world, students also regularly examine primary sources, policy briefs, charts, graphs, photo slideshows, College Board “briefing” papers, journal articles, CIA World Factbook data, and more.

HE44 Modern China

Although China is experiencing tremendous economic growth, deep problems in its environment and government threaten continued success. China continues to defy Western analysis: the single largest source of our trade deficit and second largest economy in the world, China still has many people living at a subsistence level; the Communists famously improved the status of women and opened their economy but persist in absolute political control. This course offers some perspective on modern China by looking at the late Qing dynasty and focusing on the events and ideas of the 20th century in China. The Birth of the Republic, the Civil War, Great Leap Forward, Cultural Revolution, and the current Post-Mao Era are among the topics treated fully. Using a variety of sources, including films essays and stories, students survey China's horrendous century and awesome potential. Students complete quizzes, two examinations, and a critical response paper.

Second Semester:

HE33 Greek Civilization

This course is designed to introduce students to Classical Greece. Students read works by Aeschylus, Sophocles, Euripides, Aristophanes, Thucydides, Plato, and Aristotle and selections from Homer and Herodotus among others. Although Greek Civilization aims to give a full view of Fifth Century Greece, including a look at its art and society, in particular, this course examines the intellectual revolution (in Athens at the end of the century), which cast doubt on the foundations of the city. This skepticism found itself coupled with the tragic aggressiveness of the Athenians in conducting their empire. A host of important people from Achilles to Alcibiades includes Sappho, Socrates, and Aspasia & Pericles.

HE53**Liberty and the Law**

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 also participate in courtroom simulations like mock trial and moot court.

HE52**History of US Cities Spring**

How did cities shape the economic and political life of the United States? What role have they played in politics, demographic shifts, and pollution? This course explores the history of American cities such as Philadelphia and look at how they have affected both life and culture in the United States. Students read Jane Jacobs's *The Life and Death of Great American Cities*, various novels and stories about life in America's great cities, and watch several films from different eras. There are also several trips and guest speakers. Assignments include essays, tests, research writing and more.

M921/M922

Algebra II / Accelerated Algebra II

one credit

Algebra II develops algebraic and geometric skills as a preparation for Pre-calculus/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-83 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 if they are seeking ways of being challenged in mathematics. There will be an emphasis on abstraction, derivation, proof and problem solving and additional topics will be examined if time permits.

M111

Pre-calculus and Trigonometry

one credit

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. Prerequisite: B or higher in Algebra II.

M121

Calculus

one credit

This course builds upon concepts mastered in the algebra and pre-calculus courses. It covers limits of functions and differentiation and integration of real-valued functions in one variable. Emphasis is placed on applications and the use of graphing calculators and computers. A graphing calculator is required. Prerequisite: B or higher in pre-calculus. (AP)

M130

Advanced Calculus

one credit

This course, equivalent to the second or third course of college calculus, develops the ideas acquired in calculus and extends to further integration techniques. Topics include: l'Hopital's rule, improper integrals, infinite series, vectors, vector-valued functions, functions of several variables, and multiple integration. Prerequisite: Calculus. (AP)

M132

Probability Theory

one credit

This course lays the foundation for advanced work in probability and data analysis. The following are a few of the topics covered in this course: counting theory, basic probability theory, conditional probability and independence of events, discrete and continuous random variables, binomial and normal distributions, joint distributions, introduction to Markov processes, statistical estimation theory, and hypothesis testing. Prerequisite: successful completion of Algebra II and a strong interest in solving challenging problems.

M133

Advanced Topics in Probability and Statistics

one credit

Advanced Topics in Probability and Statistics is an extension of the Probability Theory course. The following are a few of the topics covered in the course: a review of basic probability, covariance, correlation, Poisson and multinomial distributions, Markov processes, method of least squares, curve fitting, and inference (revisited), analysis of variance. Prerequisite: successful completion of a probability course or currently taking calculus or have taken calculus.

M112 Functions and Trigonometry**one credit**

Taken after the completion of Algebra II, this course is an alternative to Precalculus and can serve as a preparatory course for either Precalculus or Probability and Statistics. The curriculum will build on skills learned in Algebra II as well as examine new topics in various areas of mathematics. Topics studied can include: exponential and logarithmic functions, sequences and series, trigonometry and trigonometric applications, statistics and probability, matrices and analytic geometry. The TI-83 calculator is utilized throughout the course and there is a focus on modeling. This course does not serve as a prerequisite for Calculus.

C101 Computer Science one credit

Students with a strong interest in computers are given the opportunity to study programming methodology, data structures, and algorithms. The main language used is Java. There is also a section of the course that uses a graphical interface. The program used for this section is Alice.

C201 Advanced Computer Science one credit

Students with a strong interest in computers who have completed C101 will continue their study of programming methodology, data structures, and algorithms using the language Java. This course will prepare students for the Advanced Placement test in computer science. **(AP)**

S124 Advanced Biology one credit

Advanced biology is a yearlong course that is designed for students who have a deep interest in science 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, animal behavior and bioethics. Emphasis is placed on experimentation, as students work on advanced lab activities and complete an independent research project. Pre-requisite: Chemistry (may be a co-requisite), and B or higher in Biology.

S121 Green Physics one credit

This course explores physics through the lens of alternate energy sources. Standard physics topics including mechanics, waves, thermodynamics, electricity and magnetism, and optics is related to their use in alternative energy sources such as wind, solar, hydroelectric, geothermal, tidal energy etc. The math requirement for this course is successful completion of Algebra II.

Semester Electives (one-half credit each)

First Semester

SE01 Introduction to Electronics and Robotics

In this course, basic elements of modern electronics are explored. After learning how to use operational amplifiers and digital circuits, students program autonomous robots.

S125 Human Biology

In this first-semester course, students apply their knowledge of biology and chemistry to the study of human anatomy and physiology. Associated diseases and pathology are also explored. All students in this course should have satisfactorily completed Biology and Chemistry or be currently enrolled in Chemistry. Through laboratory activities and possible field trips and guest speakers, students achieve a deeper understanding of the human body, diseases, and scientific research. Prerequisites: Biology and Chemistry.

Second Semester

S126 Environmental Science

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.

S127 Astronomy/Cosmology

This course begins with a short description of what we can observe in the universe. It then moves on to examine how we can interpret what we observe to construct models of the objects found in the universe and how they evolve over time. We also look at the universe itself and the latest models that try to explain how the universe came to be in the state it is and what the future state of the universe may be.

THE WORLD LANGUAGES DEPARTMENT

The world language program is designed to equip each student with a basic level of proficiency in the oral and written use of a world language, as well as some knowledge of the literature, culture, and traditions associated with the countries where it is spoken. In Spanish and Italian courses, all classes are conducted primarily in the 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, field trips, and films. In addition, the Spanish and Mandarin curricula feature interactive learning that incorporates CD-ROM and DVD-ROM activities, 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. Returning upper-school students must complete two consecutive years of the same World Language, per the previous requirement. In Chinese, Spanish, and Italian classes, in addition to a written final exam, students' aural/oral ability is assessed through an individual oral exam.

LL10 Latin I one credit

The first course in Latin develops the vocabulary, grammar, and syntax needed for successful translation. Although Latin is not a spoken language, students learn the classical pronunciation in order to appreciate the metrical and qualitative beauty of Latin poetry. Exposure to authentic texts occurs with selections from Horace, Pliny, Seneca, Terence, and Suetonius.

LL20 Latin II one credit

This course continues to develop the vocabulary, grammar, and syntax needed for successful translation. Readings may include minor authors such as Aulus Gellius, Seneca, Juvenal, Quintilian, Augustine, and Lucan; along with major authors such as Ovid, Pliny, and Petronius.

LL30 Latin III one credit

This course emphasizes translations and elementary composition. Readings may include selections from minor authors such as Eutropius, Augustus, and Asconius; and major authors such as Cicero, Pliny, Caesar, and Catullus.

LL40 Latin IV one credit

This course is a more advanced reading course. Based on instructor and student interest, we will choose works from a range of classical Roman poets, essayists, and historians. The works of Ovid and Vergil's *Aeneid* will be the main focus. Prerequisite: average of B in Latin III and the permission of instructor

LL50 Latin V one credit

This course continues the curriculum of Latin IV. Based on instructor and student interest, we will choose works from a range of classical Roman poets, essayists, playwrights, and historians. Prerequisite: average of B in Latin IV and the permission of instructor

LL60 Latin VI one credit

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

LM10 Mandarin Chinese I one credit

This course introduces students to pinyin (a system of Romanization for Standard Mandarin), and the sounds, tones, and characters of the Chinese language. Units of study are arranged around different themes that reflect China's history, culture and daily life. The basic elements and structures of the language (i.e. common verbs, adjectives, nouns, phrases, statement and question formation, negation, interrogative words, telling time, ordering food) are presented via these thematic units. Study is enhanced by use of calligraphy, music, and folktales.

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 accumulating vocabulary and increasing their speaking, reading, and writing abilities. They also delve deeper into the lifestyle, culture, and history of the Chinese people through presentations of music, art, film, and the study of some basic Chinese idiomatic language.

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 topics from Chinese society and culture and utilize more advanced language patterns in real-life scenarios. They also continue to improve their reading and writing abilities. 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 folktale literature, news articles, and current events. 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 student's facility in using the language. Advanced grammar topics are introduced to help students become more proficient language learners. Participation in class discussions is emphasized, frequent student presentations in the target language are expected, and meetings with several local community organizations are conducted. 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.

LS10 Spanish I one credit

This course emphasizes oral and aural work, especially listening and producing the world language in **natural** social contexts. Use of images and props enhances the notion of "being in the culture" and helps avoid the need for translation. Grammar covered includes but is not limited to the present tense of regular and some irregular verbs, adjective agreement, the use of definite and indefinite articles, question formation, and the use of possessives and some object pronouns. Skits and oral presentations as well as some elementary writing help students reinforce and retain the various skills they have learned.

LS20 Spanish II one credit

This course reinforces and expands upon the learning process started in Level I. The student's ability to function in the language is increased through skits, games, and oral presentations. Past tense, object pronouns, future tense, commands, and demonstratives are covered. Students are expected to be able to perform with greater fluency in situations similar to those introduced in Level I, along with more complex situations that require changing of tense.

LS30 Spanish III one credit

This course further reinforces meaningful, accurate communication in the target language. The major tenses are reviewed and drilled, and students are expected to use them in various realistic contexts. More sophisticated grammar is also included, such as the use of relative and disjunctive pronouns and the use of indirect discourse. Reading and writing are at a more advanced level, and students begin the rudiments of analyzing literature.

LS40 Spanish IV one credit

In this course, literary analysis begins in earnest. Students read, discuss, and write critically on the short stories, plays, and novels that they read. Literature and film are presented within their historical and cultural context, and a grammar review supplements classroom activities and readings and accompanies written assignments. A greater degree of sophistication and command of the grammar are expected in the regular written essays and classroom discussions. Students are exposed to literature from various cultures that use the target language and have an opportunity to do 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.

LS 50/ Spanish V one credit

Literary analysis continues in which more complex works are read and analyzed. Film continues to supplement the literature as a means to examine the historical and social context of the language. Grammar tends to be taught from the students' own writing. This is a seminar that prepares the student 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.

LI10 Italian I one credit

This introductory course emphasizes all four basic communicative elements of language learning, i.e. listening, reading, writing, and speaking. Cultural themes are explored as students become better acquainted with contemporary Italian society. Basic grammar and vocabulary are practiced daily. Elementary projects are also incorporated into the class. This course is offered as an elective to juniors and seniors who are able to build upon the language skills acquired in their previous study of world languages. This elective course does not fulfill the language requirement for graduation

THE VISUAL ARTS DEPARTMENT

The visual arts program in the upper school teaches skills and acquaints students with an understanding of the history, creative philosophy, and the magnitude of accomplishments in various visual arts fields. Art and the making of art are critical to students' understanding of culture, environment, and diversity. Students' aesthetic development is central in a liberal arts education. Art is within all of us, and the department endeavors to nurture this ability in each and every student. The goal is to provide a visual arts environment in which technique and vision, creativity and the joy of the creative process, are honored.

Each course in the visual arts curriculum is sequentially designed, so students develop basic visual, design, and technical skills in two or three-dimensional media. The course sequence begins with Art Foundations, which is the prerequisite for all other visual arts courses. As students demonstrate competence and interest, they are encouraged to initiate projects that deepen their technical study and foster creativity. During oral critiques, a regular component of all visual art courses, students offer questions and insights about their own, and each other's work. Local and regional museum and media field trips are planned to involve students directly in the aesthetic, historical, and cultural, as well as the technical aspects, of the art world.

All upper school art classes are scheduled at the campus annex Friends Select @1700.

VA10 Art Foundations one-half 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 instruct students how to recognize and work with the visual language of art and design.

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.

VA40 Photography I one credit

In Photography I students study and become familiar with the functions of the digital camera. The class focuses on the formal elements found in photography: line, shape, value, texture, movement, light, perspective, pattern, scale, and mood. Students develop an understanding of controlling light, exposure, and composition and learn the Adobe Photoshop application as a technical means to edit and enhance digital photographs. Each student must have her or his own camera (DSLR cameras are preferred to point and shoot cameras.) Additionally, there is a lab fee of \$100 per student for supplies. Prerequisite for this class is Art Foundations.

VA81 Metalsmithing I one credit

This course emphasizes metalsmithing skills and jewelry design. Students are introduced to the history, science and design of metals as well appropriate skills in sequence. Techniques to be explored include stonecutting and setting, raising, forging, soldering, lost wax casting, photo etching and chain making. Among the projects students complete are making a silver ring with cut stone, box construction, a forged bracelet, a raised chalice or bowl, a linked chain, and a cast ring. Students are responsible for projects, quizzes, and short papers, and are required to purchase a jewelry kit at the beginning of the year. Silver and other materials are available at the student store for those that choose to work in it. There is a lab fee of \$75 for this course.

Tenth, Eleventh and Twelfth Grade Art Electives (one-half credit each):

First Semester

VA61 Portfolio Preparation

This course is designed for advanced students interested in pursuing higher levels of artistic exploration or considering art as a primary career choice. Students are expected to exercise a high degree of personal responsibility in this course. They explore illustration, figurative sculpture, as well as creative problem solving in drawing and painting. In addition to working in a variety of media, students will be further evaluated through essays, sketchbooks, critiques and presentations. The development of individual portfolios, artistic philosophies and artistic historical knowledge will be products of this course. At a minimum, students should budget at least three to four hours per week for working outside of class. The course provides regular review of students' portfolios and guidance in preparation of an art portfolio for college. Students also construct an on-line portfolio that will be accessible to colleges and art schools.

VA33 Global Art/Design-2011-2012 Focus on Latin America

The visual arts department, in collaboration with next year's Intersession focus is offering a class on the arts of Central and South America. Past and present, art from Latin America has had a major influence on world art and design. Discover the fascinating pre-Columbian cultures of the Amazon, the Andes, and beyond, and how these indigenous cultures influenced contemporary design in Latin America. Through hands-on projects including weaving, metals, ceramics, and wood, students become familiar with the fascinating and influential history of this region, as well as new works coming out of South America. This is a course designed for the student who is interested in craft, decorative arts and design. Studio Fee \$50

VA73 Printmaking

This class covers a range of printmaking techniques in both color and black and white including: dry point, calligraphy, mono and relief prints. Students learn the basics of composing in reverse, reductive printmaking, and using directional line drawing, and they have the opportunity of discovering a magical art form that offers limitless creative possibilities. There is a \$50 lab fee for student for supplies. Art Foundations is a prerequisite for this class.

VA31 Portrait and Image

In this course, students build on the fundamental concepts of image making through an exploration of portraiture. Students learn how to construct the head in drawing and painting and create sketches, caricatures, and in-depth portraits. Utilizing both their sketchbooks and the assignments, students start to identify and to cultivate their individual voices in art making. Foundations and Drawing and Painting I are prerequisites for this course.

Second Semester:

VA41 Photographic Explorations

Photographic Explorations enable students to consider conceptual ideas with their work and to practice advanced aspects of photography. In addition, students experiment with imagery by working back into photographs with drawing materials and printmaking techniques. Art Foundations and Photography I are prerequisites for this class. There is a \$50 lab fee per student for supplies

VA32 **Figure and the Narrative**

In this class, students learn about the figure and experience the wonders of life drawing. They also consider art as an instrument of storytelling. We will examine different ways in which artists have produced narrative works, including surrealism, symbolism, comic strips, and socially and politically relevant work. Students create their own narrative pieces in an array of media. Art Foundations and Drawing and Painting I are prerequisites for this class.

VA65 **Sculpture**

Philadelphia is a city rich with sculpture and public art. This course teaches students to use a critical eye as well as participating in the three-dimensional production of sculpture. Starting with simple wire sculpture, students progress to wood, stone, clay, and many other materials, exploring the three-dimensional process. Students explore a broad array of form, content, techniques and concepts that are used in creating three-dimensional objects and sculpture. Materials covered are paper, fibers, stone, metal, glass, and ceramics. Through looking at world sculpture and design, students create three-dimensional 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. Warrior statues from China, the Easter Island Stones, the David in Florence, Rodin's Thinker in Philadelphia, among many others become familiar to the students. Studio fee of \$50

VA83 **Metalsmithing II**

Metalsmithing II is a continuation of skills and techniques learned in Metalsmithing I. In the semester long course, students investigate lapidary, advanced stone setting, hinge building, chain construction, metal clay, as well as sculpture. This in depth study of silversmithing includes the construction of spoons, large bowls and candlesticks, giving students experience in larger metal work. Field trips to local studios, foundries and museums help students create a fuller understanding of metal and jewelry design. Prerequisite for this class is Metalsmithing I. Studio fee of \$50

The Performing Arts Department

Courses in the performing arts foster active involvement of students as both skilled performers and active spectators. Students are taught about the language of music and its history. In addition, individual exploration and composition are among the concepts and activities which help students become better musicians and performing artists.

MU02 Choir one credit

The choir performs a wide variety of ensemble literature for the entire community. Some prior vocal experience and music literacy are encouraged. The class focuses on acquisition and refinement of choral skills including diction, articulation, dynamics and producing a beautiful tone. Emphasis on part-singing and sight-reading 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 among the traditions of classical, jazz, blues, and/or popular music. Specific pieces are chosen based on students' musical proficiency and range of instruments in the group. Some instrumental experience is required. Alongside the emphasis on performance, students develop and enhance their musicianship skills through ear training and music theory, and by undertaking guided composition projects. In addition, students develop a knowledge and appreciation of the richness and complexity of human history and the diversity of world cultures through some exposure to music history. During the school year the ensemble provides concerts for the school community, and performs locally when opportunities arise.

MU11 Instrumental/Percussion Ensemble one credit

This group practices, performs, creates, and questions music made solely on percussion instruments. Experience with percussion is a prerequisite for this course. Having separated themselves from a more traditional ensemble that often calls upon the percussionist for color or support, members of the Instrumental/Percussion Ensemble improve their reading and technique with more challenging material, while at the same time shoulder the responsibility and enjoyment of the musical foreground. This "upside down" musical setting is an ideal place to ponder and create "solutions" for larger musical questions such as composition, arrangement, dynamics, texture, and the general nature of rhythm. The ensemble develops knowledge of a variety of musical traditions from around the world as well as a sense for contemporary trends. Aside from improving their skills on traditional instruments such as the snare drum, bass drum, vibraphone, glockenspiel, bells, triangles, hand drums, and so on, the percussionists also sonically explore everyday objects around them or created by them in search of pleasing and unique sound pallets. Students study for three out of the six days each cycle. On the remaining three days, the students join the Instrumental Ensemble class, where the percussion students work on pieces from a larger musical repertoire.

THE RELIGIOUS THOUGHT DEPARTMENT

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 service activities.

R091 Quakerism and Comparative Religion one-half credit ninth grade

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. To better understand Friends' conviction that beliefs must be accompanied by practice, RT 9 students plan and participate in three community service days.

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

The tenth-grade religious thought course combines regular classroom work and community service. 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 from *The Courage of Conviction* and from the writings of Martin Luther King. The 10th 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.

SERVICE

Service projects in upper school provide many opportunities for students to enact Friends Select's belief that "learning should be placed at the service of society" while learning about the social needs of the city of Philadelphia.

In the 9th Grade year, the class selects a theme for their service projects. The entire class works with their grade dean and advisors to identify issues related to that theme and their response to those problems. That grade continues to serve in those areas for all four years of their upper school experience, with responsibilities shifting from the Religious Thought classes in 9th and 10th grades to more planning and work by the class and advisories in 11th and 12th grades. Themes that have been identified for service include hunger/healthcare, homelessness/housing, education, environmental stewardship/sustainability, and human rights/immigration/discrimination.

MEETING FOR WORSHIP

Meeting for Worship is the Friends' (Quaker) form of worship, in which the assembled group meets in a silent, cooperative search for Truth; those who are moved to speak rise to do so out of the silence.

Students and faculty attend Meeting for Worship every Wednesday morning. We typically gather at the Central Philadelphia Monthly Meetinghouse, one block away from the school, either by division or in community with the Middle School. On occasion, we gather by advisory for more intimate worship sharing, or as an entire K-12 community in All-School Meetings for Worship. All-School Meetings are often "programmed," or planned, to celebrate a holiday or mark important occasions or themes in the life of the school.

Meeting for Worship is overseen by the student/faculty Worship and Ministry Committee.

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 his or her 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 9th 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, lacrosse, aqua games/instructional swim, general fitness, Pilates, speedball and other large group games. Students' developmental success is assessed using a variety of tools. Students can expect to have their physical skills evaluated as well as their cognitive growth assessed.

PE10 **Tenth Grade PE** **one-half credit**

The physical education curriculum for 10th graders is designed to develop individual and team fitness oriented skills. Students are instructed in the following units: pre and post fitness testing, aqua fitness/instructional swim, badminton, muscular strength and conditioning, cooperative games, golf, and volleyball. 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.

PE11 **Eleventh Grade PE** **one-half credit**
PE12 **Twelfth Grade PE** **one-half credit**

The physical education curriculum for 11th and 12th graders is designed to provide a more advanced course of study which builds upon the skills and 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.

Physical Education Waiver Policy

Juniors and seniors are permitted to waive PE requirements if they participate in two after-school sports during the school.

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" periods 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.

This policy also will not apply to students' health requirements, so participation in an after-school sport will not enable students to waive Health classes.

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, or wrestling in the winter; and baseball, tennis, or crew in the spring. Girls may choose soccer, field hockey, or cross country in the fall; basketball or swimming in the winter; and softball, tennis, 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. Participation in team sports does not, however, exempt all students from physical education (please see Physical Education Waiver Policy).

INFORMATION SERVICES

Ruth Hallowell Gray Library

The Ruth Hallowell Gray Library is at the heart, physically and intellectually, of the upper school. It serves the students and faculty of the middle and upper schools. The library houses over 10,000 volumes accessible via an online catalog. The library subscribes to a number of online databases for research purposes; many of these databases can be searched from home as well as at school. Electronic resources are accessible on the Friends Select network. The Library also offers the Power Library collection of databases made available to schools and public libraries in Pennsylvania who agree to collaborate in resource sharing. Materials from other libraries throughout Pennsylvania can be located and borrowed using Access PA, a statewide library catalog to which Friends Select belongs. The library also has a collection of newspapers and magazines. Students may use the school's computer network, which allows them access to the Friends Select Online Learning Center, the school e-mail system, software programs for coursework, and the internet. In addition to the library workstations, there are laptops available for use in the library.

The library is a place for research, student collaboration, and quiet study. The library staff is available as a resource for students, faculty, and staff. Teachers often bring groups to the library for instruction in the effective use of this facility and other information resources of Philadelphia. The library is normally open from 8 a.m. until 5 p.m. on school days.

Computers and Computer Rooms

There are two computer rooms for the upper school as well as a number of classrooms with multipliable computers available for the specific courses taught in that room. The Computer Room in the main building is centrally located in the upper school adjacent to the library. All of the workstations are connected to the school's network, enabling faculty, staff, and students to use e-mail, the internet, and many software programs. There is also a scanner available for student use. The facility is open throughout the school day, and students use the Online Learning Center, and do coursework during study halls, free periods, and breaks. After school, students can use the library computers and laptops for their coursework.

The second computer room is located in the campus annex @1700. It is used for the fine arts classes. These Macintosh computers are equipped with appropriate software for the art courses and a color printer. This facility is only used for classes; students cannot work in the room unsupervised. A large-screen projection system is available for class instruction in both. The Friends Select computers are to be used for educational and school purposes only.