



# UPPER SCHOOL COURSE OF STUDY



STRONG MINDS.  
KIND HEARTS.

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# *Course of Study 2014-2015*

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Friends Academy is committed to developing a diverse community whose members are respectful, responsible and reflective, open-minded and creative in the pursuit of excellence. Students are challenged to think analytically and independently and to strive for spiritual awareness, emotional well-being, and physical health. As a community, we are committed to understanding and honoring Quaker testimonies of integrity, simplicity, patience, moderation, peaceful resolution of conflict and service within and beyond the school community.

*Excerpted from The Portrait of the Community*

## **OBJECTIVES**

In academic terms, the course of study of Friends Academy gives its students the foundations of a liberal arts education and the skills required for further studies.

In a larger sense, the whole program of the school has as its objective the physical, spiritual, artistic, and emotional development of each student.

The following list states our objectives within the major academic departments:

**English:** To develop in our students the ability to think clearly, read thoughtfully, communicate effectively, listen intelligently, and understand literature not only as a source of information and enjoyment, but also as a record of human thought and spirit through the ages, as a guide, therefore, to a clear perspective of the conflicting ideas and ideals of today's world.

**History and Social Studies:** To increase the students' capacity to understand the world in which they live; to inform them of the historical process which produced that world; to encourage them to think critically and to evaluate objectively by seeking solutions to contemporary problems and by interpreting issues of the past; and to prepare them for enlightened, active citizenship in this culturally diverse society.

**Mathematics:** To develop the students' competence in handling mathematical concepts and processes; to increase their awareness of mathematical ways of thinking; to promote their appreciation of possible applications of mathematical thought in other areas of study; and to provide a solid foundation for further study in mathematics.

**Science:** To develop students' understanding of basic scientific principles in order to foster growth as knowledgeable citizens; to develop an understanding of a diversity of living organisms with an emphasis on the human and relate this understanding to the problems of preservation and conservation of the world resources; and to develop an awareness of ethical issues regarding the use of science and technology. We help students achieve this through teaching that emphasizes analytical skills based on experimental observation, and, wherever possible, mathematical application of concepts and laws; open-ended questioning; and reflective writing in journals, research notebooks, and lab reports.

**World Languages and Cultures:** To help students build proficiency in the oral and written use of a second language, as well as gain a fundamental knowledge of the literature, culture, and traditions associated with the nations where it is spoken.

**Arts:** To promote creativity, self-discovery, and individual expression in the exploration of ideas and experiences while developing artistic and technical skills in all aspects of the arts.

**Religion and Ethics:** To help students discuss and share their personal beliefs and values, while acquainting them with the variety of religious thought and experience; to enable them to grow philosophically and spiritually.

**Computer Science:** To help students understand the technology all around them and the programming that makes it work; to help them develop the skills needed to use current computer hardware and software and to learn new technologies; to increase students' awareness of technological resources and develop a good foundation for using technology in all areas of the curriculum; and, to provide opportunities for students to acquire advanced skills in computer science and related fields.

**Physical Education:** To strive for healthy physical, mental, emotional, and social growth.

**Health:** To focus on critical health issues confronting today's young adults and to help them to develop positive decision-making skills.

*The following list states our objectives within the non-academic departments:*

**Community Service Program:** To foster in our students an awareness of suffering, tragedy, and injustice, and a commitment to use their talents and skills for the benefit of others, and to engage students in concrete service projects in our community. The required tenth grade YSOP overnight program in NYC provides our students an opportunity to work in soup kitchens and pantries that support the homeless. In addition to requiring the 10<sup>th</sup> grade community service course and trip, we strongly encourage our students to volunteer for our after school program, serving children, youth, the handicapped, the homeless, and the elderly. The W.A.T.C.H. committee has a list of volunteer opportunities.

**Independent Service Project (ISP):** ISP is a graduation requirement for seniors that provides a two or three week opportunity at the end of May and beginning of June for seniors to pursue activities and studies in the community. Each senior designs a project that is reviewed by an ISP committee, composed of faculty and students. The student also chooses a sponsor to work with on the project. (Finding an outside sponsor is encouraged; a faculty advisor then acts as a liaison between the sponsor and the school.) Upon completion of the project, the student gives a presentation to the seniors and the ISP committee. The ISP committee rates the project as satisfactory or unsatisfactory, and this rating goes on the student's official transcript. The student must earn a grade of satisfactory to fulfill the graduation requirement.

**Work Program:** All students are required to contribute their help to the school. The housekeeping chores of lunchroom and classroom clean-up, the occasional need for admissions aides and tour guides - all offer opportunities for service to the school, to foster a sense of belonging, of caring, of making a positive difference to the physical and social ambiance of Friends Academy.

Finally, within the various academic areas we attempt to strike a balance between the cognitive and affective aspects of education. The cognitive aspects are those which stress the use of reason in mastering concrete facts and abstract concepts, while the affective aspects are those which try to satisfy more fully the emotional and creative needs of the students.

## ***Planning a Program of Study***

### **GRADUATION REQUIREMENTS**

Upper School students are expected to carry five major academic courses. A student may take four or six courses in rare circumstances with specific approval of the department heads and principal. A minimum of four academic credits is required each year.

We expect students to complete all course work successfully. For ninth, tenth, and eleventh grade students, failure to do so may lead to required summer work or dismissal from Friends Academy. For seniors, failure to complete all course work successfully may delay or prevent the awarding of the diploma. The Independent Service Project may also be canceled or delayed.

Minimum requirements for a diploma are the completion of sixteen full-credits plus designated courses in religion, health, technology, physical education, community service, outdoor education, and the arts.

Students who leave at the end of their junior year to attend an accredited college may receive a diploma from Friends Academy upon presenting evidence of the successful completion of their first year in college, including a full year's course in English.

**English (four years):** English 9; English 10; American Studies in grade 11; and two semesters of English in grade 12.

**History and Social Studies (three years):** Ancient Foundations of Human Civilizations in grade 9; West and the World in grade 10; American History or AP U.S. History in grade 11. Electives are offered to seniors. Four years are recommended.

**Mathematics (three years):** Algebra 1, Geometry, Algebra 2/Trigonometry are required. For seniors not taking another math course, College Algebra with Pre-Calculus is recommended. Four years are recommended.

**Science (two years):** Two years of sciences are required; one must be a lab course. It is strongly recommended that students complete Biology, Chemistry, and Physics. Four years are recommended.

**World Languages and Cultures (two years):** The completion of level three of one world language is required.

**Arts :** One full credit of courses in the arts is required. Two or more years are recommended

**Religion and Ethics (three semesters):** Quakerism in grade 9, Community Service in grade 10, and Religion in American Culture in grade 12 are required courses. The following commitments are also required of all students:

**YSOP:** As part of the culminating experience for the grade 10 course, tenth graders take part in an overnight work camp in Manhattan.

**Work Program:** Every student is expected to take part in the daily work program on campus, cleaning classrooms and common areas.

**Weekly Quaker Meeting for Worship:** “The most important appointment of the week,” all students are expected to attend Meeting for Worship on Thursday.

**Community Service:** At all grade levels, students are expected to do volunteer work at local agencies.

**Computer Science (one semester)**

**Physical Education (four years):** All students are required to take the Physical Education classes unless they are playing on an interscholastic team. All dance classes count toward Physical Education credit.

**Health (2 semesters):** Health courses in grades 9 and 11 are required.

**College Readiness (one semester):** Required weekly course designed to support seniors in the college application process.

**Outdoor Education:** All ninth grade students are expected to participate in this three day program .

**Independent Service Project (ISP)-** This service project is a graduation requirement for all seniors.

**Preliminary Scholastic Aptitude Test (PSAT)**

The PSAT is a practice test for the SAT and students need not share their scores with colleges. The test is offered at Friends in October and is optional for 10<sup>th</sup> and required for 11<sup>th</sup> grade students. The PSAT can be used to estimate the SAT score by adding 50 points each to the math and verbal and writing PSAT score. The PSAT scores for juniors will be used to select National Merit Semi-Finalists and National Merit Commended Students (who are in the top 1% and 5%, respectively, of juniors across the nation who take the test), and these students can become eligible for merit scholarships at some colleges.

**Advanced Placement Level Courses**

Advanced Placement (AP) courses enable students who are eligible to take college-level courses while still in upper school. The courses which delve into greater depth than standard courses, teach skills that can prepare students for the rigors of college. They help students to develop solid writing skills, problem solving techniques, and good study habits. These courses push the students intellectually and help students to learn to develop and support their own arguments and perspectives.

Virtually all departments offer AP level courses at Friends. Not all students are ready for the rigors of an AP course; therefore students who are interested in taking AP level courses must meet the departmentally determined prerequisite

requirements as outlined in the course of studies.

Students enrolled in an AP course are expected to prepare for and take the AP exam in May. Scores on the exam are not automatically sent to perspective colleges and universities that students are applying. Students must give permission to the College Board to release exam grades to the schools they have selected. Many colleges and universities grant student credit, placement, or both for qualifying AP exam grades (not for the course grades).

Students will be informed in late winter about the date, cost, and registration procedures for the exam. More information about AP exams can be found on the web at [www.collegeboard.com](http://www.collegeboard.com).

### ***QUANTITATIVE AND QUALITATIVE DEFINITION OF GRADES***

A+ (97-100%) Performance demonstrating excellent

A (93-96%) understanding and application of

A- (90-92%) concepts, and high skill level, thorough assimilation of detail, originality of thought, and keen insight into the subject.

B+ (87-89%) Performance demonstrating good

B (83-86%) understanding and application of

B- (80-82%) concepts, good acquisition of skills, accurate application of details, and some original insight into the subject.

C+ (77-79%) Performance demonstrating basic

C (73-76%) understanding of the fundamental

C- (70-72%) concepts of the subject and a consistent attempt to apply the details and skills taught. In spite of occasional conceptual misunderstanding, or flawed or incomplete knowledge, the performance indicates satisfactory preparation to advance to the next level.

D (65-69%) Performance demonstrating minimal understanding of the fundamental concepts and a partial acquisition of the details and skills taught.

F (below 65%) Performance that fails to demonstrate understanding of the fundamental concepts of the subject and/or performance that indicates pronounced lack of knowledge or skill. Achievement is inadequate to allow the student to advance to the next level.

INC A grade of INC (incomplete) is applied when work that has not been turned in by a student is deemed by the teacher to be an essential component for the grade. Students have one week from the end of the grading period to complete the work. In the case of extenuating circumstances (extended illness, family emergency, etc.), the teacher and student in consultation with the principal and department head, will determine the deadline for completing the work. No penalty would be applied in this case. In all other circumstances, the student is expected to complete work within one week of the end of the grading period. A penalty in grading will be applied. If a student does not complete the work within the expected time, a failing grade will be assigned to the missing work. An incomplete will remain on the transcript until the work is turned in. Once the work is turned in, the teacher will calculate the grade for the course and the incomplete will be changed. If by the end of the school year, the work has still not been turned in, the student will receive an incomplete for the course and will not be able to return to Friends for the following school year.

PAS Indicates a “passing” or “having participated” grade.

We do not rank in class; nor do we compute grade point averages.

### ***COURSE DROP/ADD POLICY***

Courses may be changed, dropped, or added in the first three weeks of the course for all courses. Thereafter, any course dropped appears as a "DROP" on the transcript, with no credit awarded. A Drop/Add form must be signed by the teachers involved, advisor, parent, student, Academic Counselor, and by the Director of College Counseling for seniors.

To drop/add a course, the student must pick up a Drop/Add Form from the College Counseling Office or the Upper School office. The student must receive approvals and signatures from the Academic Counselor first, then the teacher of the course being dropped, teacher of the course being added, advisor, parent. If the student is a senior, the same protocol should be followed; in addition, the Director or Associate Director of College Counseling must sign the form. The final decision regarding a drop/add rests with the Upper School Principal and/or Director of College Counseling.

If you are a senior, and if we have already sent your mid-year transcript to colleges, a copy of the transcript reflecting the dropped course (with no credit awarded) and a letter from the Director of College Counseling indicating the reason for the drop, may be sent to the colleges to which the student applied or received acceptance.

### ***GRADING POLICY regarding DROPPED COURSE***

A student who has remained in a course past the add/drop period and who is struggling, either because the student was new to Friends and was misplaced or because the teacher feels the student will be better served in a less strenuous course should be encouraged to shift to an appropriate course not later than the mid-point of the first semester. If the student makes this move by this time, the grade in the current class will not be factored into the grade in the new course. Should a student opt to remain in the course and then shift to another course after the mid-point, the grade will follow to the new course and be averaged in with the grade in the new course based on the number of weeks in the course.

### ***DENIAL of COURSE CREDIT***

Students may not be awarded course credit in a class if they miss more than twenty percent of class time due to excused or unexcused absences, tardiness, or early departures. Class attendance is taken on a period-by-period basis. The student and parents will receive a written warning notification prior to reaching the twenty percent.

### ***CUM LAUDE***

In order to recognize students who have achieved a distinguished academic record in their Upper School years, Friends Academy, which has had a Cum Laude Chapter since 1939, elects students to that national honor society each year at Fourth Day Honors.

In keeping with the directives of the Cum Laude Society, the Friends Academy Chapter chooses its student members on the basis of academic excellence alone. Distinguished performance in other areas, such as athletics, leadership, the fine and performing arts, is recognized in other ways.

As stated in the Cum Laude Society handbook, a Chapter "may elect not more than 20% of the senior class who have demonstrated academic excellence in the college preparatory curriculum.... The definition of what constitutes an honor record and the determination of how to select members is left to the discretion of the individual Chapter."

Students elected to the Friends Academy Chapter of Cum Laude must have been students at the Academy for a period of at least three consecutive semesters.

# Course Descriptions

## ENGLISH

### Full-Year Courses

Introduction to Literary Genres (Grade 9; required)

Global Literature in English (Grade 10; required)

American Studies (Grade 11; required)

AP English Literature (with a grade of A- or higher in English 11 and teacher recommendation)

### Fall Semester Courses

Writing Fellows (required course for Writing Fellows only; ¼ credit)

“Areas of Darkness”: Literature and Narrative in South Asia

The Least Depressing Shakespeare Course Ever

AP English Language and Composition

Journalism: Student Publications (¼ credit)

### Spring Semester Courses

Creative Writing (with application and approval of department)

Narrative and African-American Identity

Modern Drama and Theater

AP English Language and Composition

Journalism: Student Publications (¼ credit)

Speech and Debate (¼ credit)

### Please note:

The English Department requires that all students use the editions of books listed in the Friends Academy Book List for 2014-2015. The editions listed in the textbook list were carefully selected by faculty for specific pedagogic reasons, including the quality of supporting material like notes and essays, and, in the case of pre-modern and foreign texts, the quality of the translation. In addition, the Department strongly recommends that families purchase English texts in the form of books or ebooks for the student's private library. We believe in the value of annotation as a tool of close literary analysis, and we recognize that this is a skill that students will need in order to succeed in college courses.

### Full-Year Course Descriptions

1010 Introduction to Literary Genres (*Grade 9; Required*) The aim of this course is to teach students to think and write clearly and to read insightfully and critically. Our reading of selections from the Bible, Homer’s *Odyssey*, Sophocles’ *Oedipus* and Shakespeare’s *A Midsummer Night’s Dream* provides a foundation in the great literary traditions of Western culture. Special emphasis is placed on closely reading the genres of romantic comedy, epic, and tragedy; reading lays the foundation for the development of analytical writing skills and affords opportunities for more creative and expository writing. The above works are supplemented by ample readings of short fiction and poetry. To introduce the research and documentation skills necessary for good scholarship, the course includes a short research paper. There is a final exam in literature and grammar at the end of the year. (*1 credit*)

1020 Global Literature in English (*Grade 10; Required*) This course introduces students to global literature written in English and provides a broad cultural perspective to help them understand the place of their language, their stories, and themselves in the West and in the world. Students begin the year studying canonical English genres and texts, including Shakespeare’s *Macbeth* and Shelley’s *Frankenstein*. They are then be exposed to non-Western literature in English, specifically the rich tradition of imperial and post-colonial literature, beginning with Kipling and Orwell, and ending with Achebe and Dangarembga. Students build on the written and oral communication skills developed in English 9, practice visual analysis of film and art, and concurrently, gain fluency as readers through participation in an independent reading project (the IRP). The year culminates with a major literary research essay and oral presentation based on a post-colonial author and tradition of their choice. Students read primary texts by authors such as Chimamanda Ngozi Adichie, Jamaica Kincaid, and Michael

Ondaatje; source critical reviews and academic articles; and do the kind of the literary-historical research that enables them to place their author and his or her texts in context. The research paper and oral examination count as the “final exam” for course. (1 credit)

**1210 American Studies** (Grade 11; Required) This course explores the intellectual, literary, and artistic life of America from its colonial era to the present. All eleventh-grade students read the following authors of great American literature: Anne Bradstreet, Nathaniel Hawthorne, Emily Dickinson, Walt Whitman, Stephen Crane, Mark Twain, Kate Chopin, F. Scott Fitzgerald, Ernest Hemingway, Tennessee Williams, Langston Hughes, and Arthur Miller. Literary analysis, close reading, and studying literature in its historical context comprise the core of this course. Emphasis is placed on developing independent analytical skills, and students have many opportunities to cultivate their own voices, both in class discussion and as they continue to refine their literary writing. While the literature and the examination of its contextual importance remain central to our study, time is also devoted to the art, architecture, and music of the period studied. The basic text is The Harper Single Volume of American Literature, and the textbooks for the art and architecture are Michael J. Lewis’s American Art and Architecture and Carol Davidson Cragoe’s How to Read Buildings. The school Humanities website for American Studies and other Internet resources will be used to supplement the text. In addition to literary criticism and expository essays, there are exams on the literature and art of the periods we study, and all eleventh-grade students write a 10-12 page research paper. The research paper counts as the “final exam” for the course. Students that earn an A- or higher and receive teacher recommendation will qualify for the Advanced Placement Literature course offered in the senior year. At midyear, strong candidates are reviewed for tentative recommendation. (1 credit)

1042 AP English Literature (Grade 12; prerequisites: a grade of A- in American Studies and teacher recommendation) The AP English Literature and Composition course is a year-long course designed to engage students in the careful reading and critical analysis of imaginative literature. The course requires intensive study and active reading, interpretation, and evaluation of a variety of texts by the students. Writing is also an integral part of this course. The goal of the writing assignments is to increase students’ ability to explain clearly and cogently, even gracefully, what they understand about literary works and why they interpret them as they do. The hope is that students will not only be well prepared for the A.P. exam in the spring, but they will also gain an appreciation of the value of literature in their lives. Writers include Bronte, Austen, Hemingway, McCarthy, Morrison, Joyce, Melville and Shakespeare. Students who take this course are required to take the AP English Literature exam given in the spring. Students may take either the AP English Language and Composition course OR the AP English Literature course; they may not enroll in both courses. (1 credit)

### **Semester Course Descriptions**

1088 Writing Fellows (Grade 12; required course for participants in the Writing Fellows Program) This course will provide students with the advanced training in composition and pedagogy that they will need in order to successfully mentor our ninth-grade writers. The large group will meet bi-monthly during the first lunch period for instruction and discussion of assigned readings, and students will meet with the instructor once per month for more individualized feedback and instruction. Readings will include sample student work, as well as articles by experts in the fields of writing instruction, rhetoric, and style. All readings will be available on the Writing Fellows portal page. (Fall, 1/4 credit; P/F)

1040 AP English Language and Composition (Grade 12; there is no prerequisite for this course) A semester-long course designed to engage students in becoming skilled readers and writers. The course requires active reading, interpretation, and evaluation of a variety of texts. One of the goals of this course is to make students aware of the interactions among a writer’s purposes, audience expectations, and subject matter, as well as of the way genre conventions and language contribute to effectiveness in writing. The course will include readings from a variety of disciplines and will emphasize argumentative, expository, and analytical writing that forms the basis of academic and professional communication while also encouraging personal and reflective writing to foster the development of good writing in any context. The primary basis of assessment in this course includes bi-weekly essays completed in-class as well as regular reading quizzes and tests. Students who take this course are required to take the AP English Language and Composition exam given in the spring. Students may take either the AP English Language and Composition course OR the AP English Literature course; they may not enroll in both courses. (Fall and Spring; ½ credit)

1035 The Least Depressing Shakespeare Course Ever (Grade 12) With signature masterpieces such as *Hamlet*, *Macbeth*, and *King Lear*, Shakespeare certainly made his name as a writer of tragedy. But can you imagine a Shakespeare course in which no one dies and (almost) everyone is happy in the end? This semester-length investigation of Shakespearean comedy will establish the hallmarks of the genre in plays such as *Twelfth Night* and *As You Like It* before moving on to other texts that complicate, or ‘problematize,’ the idea of comedy itself – among them *The Merchant of Venice* and *Henry IV, Part 1*. While reading these texts, we will also examine film adaptations of *Much Ado About Nothing* and *The Taming of the Shrew*, as well as modern renditions such as *She’s The Man* and *10 Things I Hate About You*. (Fall; ½ credit)

1036 “Areas of Darkness”: Literature and Narrative in South Asia (Grade 12) Writer V.S. Naipaul, Trinidadian by birth but South Asian by descent, called India an “Area of Darkness” in his famed travel narrative of the same name. British novelist E.M. Forster thought the subcontinent was a “mystery” and a “muddle”. For Charles Dickens, India and Indians contained both terror and tremulous passion. In this course we will examine Western definitions of South Asian literary space and culture before examining the body of our work, modern South Asian narratives emerging from inside the subcontinent. Selected readings may include Dickens’ *The Mystery of Edwin Drood*, stories from Rudyard Kipling, Rabindranath Tagore’s *The Broken Nest*, stories from Saadat Hasan Manto, selections from V.S. Naipaul’s *Area of Darkness*, Salman Rushdie’s *Midnight’s Children*, Amitav Ghosh’s *Shadow Lines*, Kiran Desai’s *Inheritance of Loss*, and Daniyal Mueenuddin’s *In Other Rooms, Other Wonders*. Political context, especially the divergent nationalisms that split British India into two, and finally, three independent nations, will accent our study of the literature. Students will respond to course readings in bi-weekly response papers, graded discussion and in-class analytical essays. A final, independent project will involve the use of multiple texts and an interdisciplinary focus. (Fall; ½ credit)

1032 Narrative and African-American Identity (Grade 12) This course examines the role narrative has played in shaping the African-American experience from the 19th century to the present. Works by fugitive slaves such as Frederick Douglass, Henry Bibb, and William and Ellen Craft are paired with memoirs and novels by Danzy Senna, W.E.B. Dubois, bell hooks and others. Discussion and writing will focus on analyzing the voices of African-Americans from the perspective of using narration as an expression of self-determination. (Spring; ½ credit)

1033 Modern Drama and Theater (Grade 12) Interdisciplinary study of seminal theatrical works by European and American playwrights, directors, composers, and scenographers including Büchner, Berg, Ibsen, Strindberg, Chekhov, Stanislavski, Meyerhold, Stein, Cocteau, Treadwell, Brecht, Weill, Beckett, Williams, and Miller. Original stage productions will be studied holistically, as both interdisciplinary works of art and as artistic responses to specific crises in modernity. Students will have the opportunity to hone their critical reading and writing skills as well as their understanding of 19<sup>th</sup>- and 20<sup>th</sup>-century western cultural history in preparation for college. Frequent quizzes will check for reading comprehension, and students will be assessed at the end of each unit on their critical reading abilities as well as mastery of content. Students will also complete two projects over the course of the semester, one of which will require working creatively and collaboratively with others. (Spring; ½ credit)

1090 Creative Writing (Grade 12) This class will emphasize the relationship between being a good reader and being a good writer. Storytelling –actively engaging a reader on an emotional level—will play an important role in the development of each student’s writing. Students will write in a variety of forms and will workshop their pieces in conversations with the instructor and their peers. A final portfolio of work developed over the course of the semester will involve pieces of short fiction, a children’s book, a collection of poetry, and a one-act play. (Spring; ½ credit)

1063 Journalism: Student Publications (Grades 10-12) Single-semester minor elective designed to introduce students to the fields of print and online publishing and the craft of journalism, broadly defined. Students will study outstanding examples of news, feature, editorial, arts, creative writing, layout, and graphic design culled from both professional and high school publications. Beats will be assigned depending on individual strengths and interests, and students will be required to produce work for publication in *The Inkwell* (the on-line school newspaper), *Gnosis* (the literary magazine), and/or *The Lamp* (the yearbook). (Fall and Spring; ¼ credit)

1064 Speech and Debate (Grades 10-12) Single-semester minor elective. Speech and Debate aims to train and develop students’ skills and confidence in the areas of public speaking, debate, and oral performance. The course will cover logic and argumentation as well as the fundamentals of effective public speaking: preparation, pace, tone, vocal expressiveness, and

anxiety management. Though they may choose not to participate, students will be prepared for competition in Long Island Forensic Association events. Whether or not they compete, all students will participate in class debates, performances, and all other required activities. *(Fall and Spring; ¼ credit)*

## ***HISTORY AND SOCIAL STUDIES***

### **Full-Year Courses**

9th grade: Ancient Foundations of Human Civilizations (required)

10th grade: The West and the World (required)

11th grade: American History or AP United States History (required)

AP Government and Politics: United States and Comparative

AP Human Geography

AP European History

### **Fall Semester Courses**

Introduction to Microeconomics

### **Spring Semester Courses**

Introduction to Macroeconomics

### **Full-Year Course Descriptions**

5220 Ancient Foundations of Human Civilizations (Grade 9 – Required) This required course is the first of a two-year sequence designed to give students a basic understanding of the major civilizations that have contributed to the world as we know it today. The first year covers the ancient history of all the major world civilizations and brings students up to the period just before the French Revolution. Particular attention is given to the birth and influence of ideas including the major world religions, the variety of political and social systems, scientific, intellectual and technological contributions made and the logic of events that have moved the world toward modern times. Great attention is also given in this first year to developing essential skills the students will need to further their intellectual growth: reading, analyzing, note-taking, listening, speaking, and writing. There is a final examination in this course that counts for 1/5 of the year's grade. (*1 credit*)

5230 The West and the World (Grade 10 – Required) This second-year course continues the story of civilization begun in the ninth grade. The course takes a global and comparative perspective on the events and processes in our increasingly interdependent world. Students learn about the forces of imperialism, revolution, nationalism, socialism, and capitalism, and examine their effects on the development of Asian, African, European, and American civilizations. The course employs secondary sources as well as excerpts from original materials to help each student understand that the study of history involves both information and interpretation. Students are challenged to analyze information in relation to our own time and to the evolution of political, social, and cultural institutions and ideas. The course also emphasizes oral and written expression through regular essays, papers, quizzes, unit tests, and classroom presentations. Students complete a major research paper in the spring that focuses on the relationship of a developing country to the forces of modernity. There is a final examination in this course that counts for 1/5 of the year's grade. (*1 credit*)

5020 American History (Grade 11; Fulfills American History Requirement) This course is a topical, chronological survey of the growth and development of the United States from the European conquest of America to the present. Students study the major political, economic, social, intellectual, and diplomatic trends that are discernible in the history of the United States. Special emphasis is given to an understanding of the Constitution, the rights and duties of citizenship, the evolution of American institutions and majority and minority movements throughout history. Students are challenged to analyze primary and secondary sources and to relate the information to our own time. Attention is given to current events, and students are expected to discuss and debate important issues as they arise. Students improve their writing skills in regular written essay tests and short research papers. Class discussion provides a format for oral communication and critical thinking. There is a final examination that counts for 1/5 of the year's grade. The course prepares students for the College Board SAT II test in United States History, given in June. (*1 credit*)

5041 AP United States History (Grade 11; Fulfills American History Requirement. Prerequisite: Grade of A- or better in The West and the World and departmental recommendation.) This college-level course surveys American history from the pre-Columbian era through the 1980s. Students engage in sophisticated analysis of the past, interweaving politics, culture, and economics. Papers are assigned throughout the course, and it is expected that they will be submitted in polished form. The

texts for the course are Alan Brinkley's *American History: A Survey* and *The American Spirit* Vol. I and II (a collection of primary source documents) by Bailey and Kennedy. Performance on tests and papers, as well as participation in discussion, determines a student's grade. Students are required to take the AP U.S. History exam in the spring. The course prepares students for the College Board SAT II test in United States History, given in June. (*1 credit*)

5094 AP Government and Politics: United States and Comparative (Grade 12; Prerequisite: Grade of A- in American History and departmental recommendation; grade of B+ or better in AP United States History or a score of 3 or better on the Advanced Placement exam and departmental recommendation. Students with a B+ in American History or B in AP U.S. History may petition. See department head for details.) This course combines the curricula of the AP U.S. and AP Comparative Government and Politics courses. Students will be prepared for both AP tests and must take at least one. We intersperse units on the American political system (political culture, ideologies, institutions, civil society) with the six countries covered on the AP Comparative exam (Russia, Great Britain, China, Nigeria, Iran, Mexico). Students develop a good grasp of the major political and economic systems operating in today's world. The course involves both the study of broad concepts used to interpret politics and the analysis of specific case studies. It also develops familiarity with the various institutions, groups, beliefs, and ideas that constitute governments around the world. Seminars, debates, presentations and projects are assigned throughout the course. As stated above, all students are required to take either the AP Comparative or AP U.S. Government exam in the spring. Students may choose to take both exams. (*1 credit*)

5093 AP Human Geography (Grade 12; Prerequisite: Grade of A- in American History and departmental recommendation; grade of B+ or better in AP United States History or a score of 3 or better on the Advanced Placement exam and departmental recommendation. Students with B+ in American History or B in AP U.S. History may petition to apply to the course. See department head for details.) This college-level course introduces students to the systematic study of how humans interact with the Earth's surface. Students look at how geography shapes political, social and cultural developments, and how, in turn, humans change their environment. They develop an ability to look at the world from a spatial perspective, always taking into account our interactions with our natural and built environments. They also learn the methods and tools geographers use in their science and practice. Major topics in the course include: geographical themes, population studies, cultural identities, political geography, urbanization, agriculture, global economic development, and environmental issues. All students are required to take the AP Human Geography exam in the spring. (*1 credit*)

5090 AP European History (Grade 12; Prerequisite: Grade of A- in American History and departmental recommendation; grade of B+ or better in AP United States History or a score of 3 or better on the Advanced Placement exam and departmental recommendation. Students with B+ in American History or B in AP U.S. History may petition to apply to the course. See department head for details.) This college-level course surveys the history of Europe from the Renaissance to the present. It engages in sophisticated analysis of primary and secondary sources that interweave intellectual, cultural, political, diplomatic, social, and economic history. Students develop a firm grasp of chronology, geography, and major events. Just as important, though, are the stories they learn about European history. Each era has its own characters and plot, its own set of interpretations, and its own messages for our times. In addition to providing historical content, a major goal of this course is to give students the opportunity to develop skills as historians. Assignments emphasize efficient reading and note-taking, thoughtful analysis and interpretation of historical evidence, and clear written and oral expression. All students are required to take the AP European History exam in the spring. (*1 credit*)

### **Semester Course Descriptions**

5814 Introduction to Microeconomics (Grade 12) This course will cover basic microeconomic concepts. Students will begin with a study of the market system, including the essentials of demand and supply analysis; competition and monopoly; labor; public policy toward business; the distribution of income; international trade and commercial policy; comparative advantage, tariffs and quotas. The class will also address some of the most pressing current political and economic issues, such as the sources of economic development and growth; globalization; what constitutes a desirable standard of living and quality of life; analyses of poverty and inequality; and strategies for environmental sustainability. Performance on tests, participation in class discussion, and essays will determine a student's grade. (*Fall; ½ credit*)

5815 Introduction to Macroeconomics (Grade 12) This course will cover basic macroeconomic concepts. Students will study factors affecting the level of national income; the essentials of money and banking; the role of government expenditure

and taxation in achieving economic stability, growth and development; and international monetary issues, including exchange rates and the balance of payments. The class will also address some of the most pressing current political and economic issues. Performance on tests, participation in class discussion, and essays will determine a student's grade. (*Spring; ½ credit*)

## **MATHEMATICS**

### **Full Year Courses**

Algebra 1 (required)  
Geometry (required)  
Algebra 2 & Trigonometry (required)  
Pre-Calculus  
College Algebra with Pre-Calculus  
Calculus  
AP Calculus AB  
AP Calculus BC I  
AP Calculus BC II  
AP Statistics

### **Full Year Course Descriptions**

2073 Algebra 1 (Grade 9) This is the first of a three-year math sequence which spirals the major topics of the upper school curriculum. The emphasis of the course is on algebra, including operations on numbers and algebraic expressions, solutions of equations and inequalities, factoring, graphing in one and two dimensions, and using the quadratic formula. A substantial part of the course is devoted to the introduction of topics in geometry. Definitions and theorems are introduced and investigated without proof. The topics of probability and statistics are introduced briefly. Students demonstrate their learning through quizzes, tests, and a final exam. (1 credit)

2074 Geometry (Grades 9-10; Prerequisite: Algebra I or equivalent.) The second year of the three-year sequence continues and extends topics in algebra, introducing the quadratic function. The keystone of this course is the study of geometry with the introduction of the formal geometric proof. Algebra is reviewed and frequently incorporated in this course. Geometric topics include similarity, right-triangles, trigonometry, and circles. The course concludes with a study of coordinate geometry including some conic sections. Students demonstrate their learning through quizzes, tests, and a final exam. (1 credit)

2075 Honors Geometry (Grade 9; Prerequisite: Algebra I with grade of A or better, teacher recommendation and department head's approval.) This course covers the topics in Geometry in greater depth and at a faster pace. A significant amount of time is spent on proofs, including geometric inequalities and coordinate geometry proofs. In addition, students will examine mass point geometry and conic sections. Throughout the course, students are encouraged to think creatively and inquisitively work through challenging problems. Projects are assigned and students are required to participate in the month New York State Math League contests. Students demonstrate their learning through quizzes, tests, and a final exam. (1 credit)

2076 Algebra 2 & Trigonometry (Grades 10-11; Prerequisite: Geometry or equivalent.) The third course in the three-year sequence reviews and expands on basic algebra concepts such as exponent properties, rational expressions, equations & inequalities. The unifying concept of the function is introduced emphasizing both algebraic and graphical representations and functional relationships. This concept is developed through the exploration of exponential, logarithmic functions, and trigonometric functions. Data analysis and statistics are introduced culminating in the study of the normal distribution. There is an introduction to the use of the graphing calculator. Students demonstrate their learning through quizzes, tests, and a final exam. (1 credit)

2077 Honors Algebra 2 & Trigonometry (Grade 10; Prerequisite: Honors Geometry, teacher recommendation and department head's approval.) This course is designed to prepare students for the two-year AP Calculus course leading to the AP Calculus BC exam. It covers the topics in Algebra 2 & Trigonometry (Sequential 3) in greater depth and at a faster pace. Various topics in Pre-calculus are included such as polynomials, exponential and logarithmic equations, exponential growth and decay, and arithmetic and geometric sequences. Students are required to participate in the monthly New York State Math

League contests. Students demonstrate their learning through quizzes, tests, and a final exam. (1 credit)

2120 Pre-Calculus (Grades 11-12; Prerequisite: Algebra 2 & Trigonometry or equivalent) This is an intensive calculus preparatory course, taken as an elective, but strongly recommended to students who have done well in Algebra 2 & Trigonometry. For seniors enrolling in this course, it is recommended that they have passed the final exam and earned at least a B- for the year in Algebra 2 & Trigonometry, if not, they should take College Algebra with Precalculus in lieu of Precalculus. The primary focus of the course is the study of functions in detail, with particular emphasis on polynomial, rational, trigonometric, exponential, and logarithmic functions. The final term includes preparation for calculus with an introduction to the concepts of limit and derivative. Students demonstrate their learning through quizzes, tests, and a final exam. (1 credit)

2114 College Algebra with Pre-Calculus (Grade 12; Prerequisite: Algebra 2 & Trigonometry) This course is designed for those seniors who need additional review in order to master the basic skills in algebra necessary for more advanced math courses. It includes an expanded treatment of basic topics in algebra, focusing on polynomial, exponential, trigonometric, and logarithmic functions and their properties. Linear programming is introduced, as well as sequences, and series. Problem solving is stressed and the computer and calculator are used wherever possible. Students demonstrate their learning through quizzes, tests, and a final exam. (1 credit)

2130 Calculus (Grade 12; Prerequisite: Pre-Calculus, teacher recommendation and department head's approval.) This course introduces the basic concepts of differential and integral calculus. It covers the derivative, the integral and applications. The course is intended for students who wish to learn calculus but not necessarily prepare for the AP Calculus test. There may be a review of basic topics in Pre-Calculus as needed for the development of the course. Students demonstrate their learning through quizzes, tests, and a final exam. (1 credit)

2119 AP Statistics (Grade 11 or 12; Prerequisite: Calc BC1 or B+ in American Studies or American Perspectives, and A in Algebra 2 & Trigonometry or A- in Pre-Calculus and approval from the AP Statistics teacher.) This course focuses on data analysis and statistical reasoning. Students will gain understanding of the main ideas of statistics and the skills needed to work with data. A large emphasis is placed on making conclusions based on mathematical results, and then communicating those results in clear, concise sentences that can easily be understood by non-statisticians. Simulation techniques are used along with the graphing and computational capability of the TI-83/84/89. Topics include normal and binomial distribution, linear regression, probability, designing experiments, and inference. Students will be prepared to take the AP Statistics exam. Students demonstrate their learning through quizzes, tests, projects and a final exam. (1 credit)

2172 AP Calculus AB (Grade 12; Prerequisite: Pre-calculus with A- or better and departmental recommendation) This college-level course introduces the basic concepts of the differential and integral calculus, including the derivative, the integral, and applications. This course covers the content of a one-semester college calculus course for beginners. A strong mathematics background and a high level of motivation are essential for success in this course. Students in this course are required to take the AP Calculus AB level exam in the spring. Students demonstrate their learning through quizzes, tests, and a final exam. (1 credit)

2140 AP Calculus BC I

2150 AP Calculus BC II

(Grades 11 and 12; Prerequisite: Honors Algebra 2 & Trigonometry and teacher recommendation) This is a two-year honors course, integrating the Pre-Calculus and Calculus courses. Students are introduced to the basic concepts of calculus in the 11<sup>th</sup> grade. This allows a more thorough treatment of material in the concurrent physical science courses. The basic content includes topics in differential and integral calculus, including the derivative, the integral, and applications. Students are required to take the AP Calculus BC level exam in the spring of their senior year. Students should understand that enrollment in this course is a two-year commitment that will require aptitude and motivation. Students demonstrate their learning through quizzes, tests, and a final exam. (1 credit each year)

## ***SCIENCE***

### **Required**

Biology

One additional year of a lab science

### **Full-Year Courses**

Biology

Chemistry

Honors Chemistry

Physics

Honors Physics

AP Biology

AP Chemistry

AP Physics 1: Algebra Based

AP Physics 2: Algebra Based

AP Physics C

AP Psychology

AP Environmental Science

### **Fall Semester Courses**

Field Marine Biology

Introduction to Engineering

### **Spring Semester Courses**

Marine Biology and Ecology

Sustainability & Innovation in Engineering Design

### **Minor Elective Courses**

Organic Chemistry

Science Projects

Engineering Projects

3D Engineering Design & Production

### **Full Year Course Descriptions**

3030 Biology (*Grades 9-10*) This course is an introduction to functions that distinguish living systems, as well as an inquiry into the composition of matter and the roles of certain biologically active molecules. Topics include, but are not limited to, genetics, physiology, reproduction and development, evolution, ecology, and molecular biology. Weekly laboratory exercises in the course focus on concepts presented in lecture. Students demonstrate their learning through tests, quizzes, laboratory exercises and projects. (*1 credit*)

3040 Chemistry (*Grades 10-11; Prerequisite: Biology*) This course is based on the American Chemical Society textbook *Chemistry in the Community*. Chemical concepts are introduced on a “need to know” basis in the context of a concern or issue. Although presented in a unique manner, the content is equivalent to what is encountered in a typical first year high school course. The goals of the course are to develop an understanding of chemistry, cultivate problem-solving skills, apply chemical knowledge to decision-making, recognize the importance of chemistry to everyday life and understand the benefits as well as limitations of science and technology.

3041 Honors Chemistry (*Grades 10-11; Prerequisites: A in Biology and an A in Geometry or B in Honors Geometry*) This course is a comprehensive introduction to chemistry including atomic structure, stoichiometry, states of matter, molecular structure, thermodynamics, equilibrium, acids and bases, introductory organic chemistry and kinetics. Successful completion of this course will enable to students to take Advanced Placement Chemistry and prepares students for the SAT II in Chemistry.

3049 Physics (*Grades 11-12; Prerequisite: Biology and Chemistry*) This course covers the traditional areas of mechanics, waves, optics, electricity, electromagnetism, and topics in modern physics. As time permits, current events involving principles of physics are also discussed. Considerable attention is given to the development of problem solving techniques. Students are expected to complete assigned problems, contribute to class discussions, and demonstrate their learning through tests, quizzes, and laboratory exercises. (1 credit)

3045 AP Physics 1: Algebra-Based (*Grades 11-12?, Prerequisites: A in Chemistry or B in Honors Chemistry; A in Algebra 2 or B in Honors Algebra 2.*) The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits. (*This course is the equivalent to a first-semester college course I algebra-based physics and takes the place of Honors Physics.*). (1 credit)

3046 AP Physics 2: Algebra-Based (*Grade 12, Prerequisites: B in Honors Physics or A- in Physics; enrollment in Pre-Calculus or higher*). This course is the equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; atomic and nuclear physics. (1 credit)

3050 AP Physics C (*Grade 12; Prerequisite: A in Honors Physics or A in AP Chemistry, enrollment in an AP Calculus course*) AP Physics builds on the foundation of the Honors Physics course, and covers the mechanics topics at a level designed to prepare students to take the AP Physics C Exam. (1 credit)

3080 AP Biology (*Grade 12; Prerequisites: A- in Biology, A- in Chemistry or B in Honors Chemistry. Those students electing to take this course must have completed Physics or are expected to take it concurrently.*) This course is the equivalent of a two-semester college introductory biology course. Students that is based on four “big ideas” (evolution, energy & homeostasis, information transfer, interactions of biological systems), enduring understandings, and science practices. The course emphasizes that science is a process, and seeks to engage students in inquiry and critical thinking. Lab work is a key component of the course. (1 credit)

3048 AP Chemistry (*Grades 11 or 12; Prerequisites: A in Honors Chemistry. Students electing to take this course in grade 11 must take a physics course concurrently.*) This course explores the topics from the first year of chemistry in greater detail and sophistication. A thorough grasp of the first year material is essential to succeed in AP Chemistry. Topics include the atomic nature of matter, reactions and stoichiometry, gas laws, atomic structure and periodicity, bonding, intermolecular forces, thermochemistry, kinetics, equilibrium, redox, electrochemistry, acids and bases, and nuclear chemistry. (1 credit)

3110 AP Psychology (*Grade 12; Prerequisite: B in Biology and Chemistry and B+ in 11th grade English*) The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other organisms. Students will read about and be exposed to psychological principals related to the world around them. Students will critically analyze theories associated with each major subfield of psychology. Writing will be an important part of this course. This year long course will be divided into fourteen units: psychological history, research methods, biological bases of behavior, sensation and perception, states of consciousness, learning, cognition, motivation and emotion, developmental psychology, personality, testing and individual differences, abnormal psychology, treatment of psychological disorders, and social psychology. Students will be required to take the AP Psychology test in the spring. (1 credit)

3025 AP Environmental Science (*Grade 12; Prerequisite: B in Biology, B in Chemistry, B in Physics.*) The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science. The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Although Environmental science is interdisciplinary there are several major unifying constructs, or themes studied that cut across the many topics included in the study of environmental science. (1 credit)

## Semester Course Descriptions

3087 Field Marine Biology (*Grade 12 or by special permission*) This course involves the characterization of the abiotic marine environment and considers many of the physical and chemical factors that influence marine life, particularly in local habitats. This course introduces students to the diversity of marine invertebrates, their interactions and evolution through fieldwork and laboratory activities. Though work is conducted primarily at several sandy beaches in Oyster Bay, students also collect samples, make observations and record data at a nearby salt marsh. Students in this course create a Field Guide as a final project. Since this is a laboratory and field course, students will take a practical exam at the end of the term. Students also keep a lab journal for labs and other activities during the course of the term as well as take quizzes and unit tests. (*Fall; ½ credit*)

3086 Marine Biology and Ecology (*Grade 12 or by special permission*) This course has no prerequisite but is a continuation of the first term, Field Marine Biology course. Students study the evolution of cartilaginous and bony fish in this term as well as their anatomy and physiology. The study of marine vertebrates includes a look at marine birds, primarily local species. Marine mammals are also studied with a focus on adaptations for life in the sea. Students study basic principles of ecology with a focus on the marine environment. As part of their field experience, students conduct experiments in larval settlement and learn to conduct a transect study. Following this introduction, students study several marine habitats including the coral reef, the estuary, the benthos, and the open ocean. Students finish the term with an examination of the positive and negative ways humans influence the marine environment as well as look at current measures used to improve the quality of this precious resource. Students prepare a habitat project, an oral presentation on man's impact on the marine environment, and take quizzes and tests. There is no final exam. (*Spring; ½ credit*)

3122 Introduction to Engineering (*Grades 11 or 12; Prerequisites: Biology and Chemistry*) This course will provide the student with an insight into the many disciplines of Engineering and the project design process. The projects selected will focus on engineering principles and their relationship to the principles of science and mathematics. Students will be guided through the steps of project process and develop various skills including identifying project goals and constraints, deciphering engineering drawings, team leadership, effective communication, critical path analysis, economic evaluations, and sustainable design practices. Deliverables for this course will include oral and written reports, design drawing and models, presenting the student's designed solutions that satisfy the projects constraints. (*Fall; ½ credit*)

3123 Sustainability & Innovation in Engineering Design (*Grades 11 or 12; Prerequisites: Biology and Chemistry. Intro to Engineering is not a prerequisite - this course can be taken without having taken that course*) This course will provide the student with an insight into the importance of sustainability and innovation in engineering design. Topics covered will include intelligent buildings, LEEDS, the patent process, the latest inventions, and alternative fuels. The course will include real world projects that employ sustainable design practices, and practices to best foster innovation. Deliverables for this course will include oral presentations, written reports, design drawing and models. (*Spring; ½ credit*)

3101 Human Anatomy and Physiology (*Grade 12 or by special permission; Prerequisites: Biology and Chemistry*) Anatomy and Physiology is an elective course designed for students who wish to delve further into the structure and function of human cells, tissues, and organ systems. Special emphasis is placed on the major body systems, how the body systems work together to provide homeostasis and body functions in healthy and diseased states. Reading and discussion of current scientific literature, especially in the areas of health and disease, are an integral part of the course. Detailed dissections, in addition to lab investigations are a required part of this course. (*Fall ½ credit*)

3121 Forensic Science (*Grade 12 or by special permission*)

This course will serve as an in-depth study of what constitutes evidence, how to collect it without destroying its forensic value, and how to obtain information from it. Students will explore the various areas that make up the broad category known as forensic science by playing the role of various professionals who are concerned with crime scene investigations, such as crime scene examiner, crime lab analyst, and medical examiner. Students will be provided actual cases to study illustrating how forensic science was used in each case. Students will be introduced to crime scene analysis and techniques including forensic entomology, botany, pathology, blood chemistry, anthropology, physical and trace evidence, and ballistics. This course will draw upon knowledge from various science courses, including biology, chemistry, and physics, but will also examine the legal system as it pertains to evidence. Students will complement all discussions with hands-on labs that will put

them at the center of a crime scene! (*Spring, ½ credit*)

### **Minor Elective Courses**

3042 Organic Chemistry (*Prerequisites Honors or AP Chemistry; Chemistry by special permission*) This course is designed for students who anticipate pursuing a health related field or a college major that requires organic chemistry. The course will provide an introduction the basic principles necessary to understand the structure and reactivity of organic molecules with emphasis on substitution and elimination reactions and the chemistry of the carbonyl group. The class will involve extensive use of models and modeling programs and will also expose the students to some basic organic lab techniques. (*Yearlong course, 1/2 credit*)

3096 Science Projects I (Grades 9, 10)

3097 Science Projects II (Grade 10)

This minor elective provides students with the opportunity to engage in extended science activities beyond the constraints of the standard laboratory period. Most of the projects are based on projects taken from the Science Olympiad and give students practice in designing, testing and making modifications to devices they have built to accomplish a particular task. As one example, students design a balsawood car powered by a mousetrap that must be able to stop at a specified distance. (Science Projects I; semester course (*fall or spring; ¼ credit, Science Projects II; full year; ½ credit*))

3091 Science Olympiad Prep (Grades 10, 11, 12) This full year class focuses on preparing students to compete in the Science Olympiad held each spring. Students will select two or three events from the 25 events available each year. The events consist of building events, hands on science events as well as test taking events and it is anticipated that students will select one from each category to work on. While the events vary from year to year, the major science disciplines are always represented. This will give students the opportunity to pursue an area they are already interested in or explore something new. (*Full year; ½ credit*)

3127 Engineering Projects

(Grades 10,11,12) This hands-on project-based course will provide the student with an insight into various engineering disciplines and the basic design process. The course will explore two distinct engineering disciplines through the student's experience of constructing a project in that field. (*Fall; ¼ credit*)

3128 3D Engineering Design and Production (*Prerequisite: 3D Design and Printing*)

Upon completion of the Digital 3D Design course, students will employ engineering design to produce a useful product capable of withstanding structural loads. Students will choose their own product and go through an iterative process of designing, predicting load capacity, printing a prototype, subjecting it to loading, and analyzing the results. Ultimately each student will produce a structurally sound, useful product. (*Spring; ¼ credit*)

## **COMPUTER SCIENCE**

### **Full Year Course Descriptions**

6010 AP Computer Science A (*Grades 11-12*) - The AP Computer Science A course is a university-level introductory course in Computer Science, covering a curriculum similar to what might be encountered in the "101" and "102" course for most undergraduate CS programs. A large part of the course is built around the development of computer programs that correctly solve a given problem. The design and implementation of computer programs is used as a context for introducing other important aspects of computer science, including the development and analysis of algorithms, the development and use of fundamental data structures, the study of standard algorithms and typical applications, and the use of logic and formal methods. The course is facilitated in the Java programming language and culminates in the AP Exam in May. (*Full Year, 1 Credit; Prerequisite: Intro Comp Sci or Instructor Approval*)

### **Semester Course Descriptions**

6822 Digital 3D Design (*Grades 10-12*) - This introductory course provides a platform for students to explore the creation of three dimensional objects through a digital medium and subsequently fabricate these objects automatically using a state of the art 3D Printer. The course follows a process-based curriculum where students have the freedom to realize objects from their

imagination with a set of skills and software tools that expands steadily throughout the semester. Concepts covered include the abstraction and visualization of geometric data, digital modeling and sculpting, and the technical requirements and constraints of the 3D Printer and its software. (*Half Year, ¼ credit*)

6007 Introduction to Computer Science (Prerequisite for AP Comp Sci; Grades 10-11) - Designed for students preparing to take the AP Computer Science course, this introductory course provides a strong foundation in practical computer programming through Python. The basics of procedural and functional programming are covered through rigorous practice and creative projects so that students are better prepared to tackle the advanced concepts and theories involved in Object Oriented Programming and Software Engineering that are present in the AP course. (*½ credit, Full (5/10) or Half Year (9/10)*)

6012 Explorations in Computer Science - Post AP (*Grade 12*) - Computer Science is a big field, and the topics covered in the AP course are just the tip of the iceberg. Students will explore, through independent and group projects, advanced topics that would be encountered in an undergraduate Computer Science program: concurrent programming, networking, computer architecture and device interaction, graphics programming, security, mobile app development, and programming language and compiler theory. (*Half Year. ¼ Credit; Prerequisite: AP Comp Sci*)

6709 Robotics I: Robot Design (*Grade 10-12*)

This class will cover the topics of in the fundamentals of robotics (including applications of applied science, technology, engineering and applied mathematics) through hands on group activities and independent projects. Students will learn about the parts that make up a robotic system and how these parts communicate with one another, enabling robots to perform tasks. As a result of this course students will have developed skills in forecasting and planning, project management, engineering & robotics knowledge, and teamwork. (*Semester 1; ¼ credit*)

6708 Robotics II: Robot Programming (*Grades 10-12*)

In this second level of robotics, students will learn how to program a robot to complete a task autonomously utilizing sensor data and user defined parameters. Students will also be introduced to the ROBOT-C programming language where they will learn basic programming skills including creating variables, method calls, code compilation, and execution. Student will learn how to write a program, install the program into the robot's memory, and have the robot execute the installed program. As a result of this course students will have developed skills in applied logic and reasoning, project management, robotics & programing knowledge, and problem solving ability. (*Semester 2; ¼ credit*)

## ***WORLD LANGUAGES AND CULTURES***

### **Required**

Three consecutive levels of Chinese, French, Latin, or Spanish.

### **Full Year Courses**

Chinese I, II, III, IV, APV

French II, IIH, III, IIIH, IV, IVH, V, APV, VI

Spanish I, II, IIH, III, IIIH, IV, IVH, V, APV

Latin II, III, IV, APV

### **Full Year ½ Credit Courses**

Introductory Latin

Advanced Introductory Latin

### ***CHINESE***

4275 Chinese I (*Grades 9-10*) This course will emphasize pronunciation, tones, grammar and the four basic skills (listening, speaking, reading, and writing) of beginning level Chinese. Students will have the opportunity to explore different topics of Chinese language, such as greetings, family, numbers, dates, seasons, hobbies, visiting friends and making appointments over the phone. Both speaking and listening comprehension skills will be enhanced through practice in our state-of-the-art language lab. In addition to this, the course will cover traditional festivals, cultural events, calligraphy, music, poetry and other cultural topics. The goal will be to build a solid foundation in the Mandarin language and the culture(s) of those who speak it. (*1 credit*)

4276 Chinese II (*Grade 10-12; Prerequisite: Chinese I or equivalent*) Chinese II will help students continue to develop the four skills of listening, speaking, reading and writing in Chinese by increasing complex sentence structures and enriching their vocabulary. At the end of this course, students will be able to talk about their daily life, weather, and clothing. They will also be able to order food in a restaurant, go shopping, ask for directions, and see a doctor in Chinese. In addition, they will learn how to read and write notes and letters. Cultural topics will include Chinese food, medicine, housing, clothing, and films. Students will learn through the study of authentic materials coupled with daily interactive classroom activities. (*1 credit*)

4280 Chinese III (*Grades 11-12; Prerequisite: Chinese II or equivalent*) This course will enable students to participate in practical day-to-day situations in Chinese. The topics in this course will include how to ask for directions, how to ask for help at the library and at the post office, how to rent an apartment, and what to say when seeing a doctor. Some interesting topics, such as sports, travel, and the growth of Modern China will also be covered. Students in Chinese III will gain more proficiency in their listening and speaking skills. They will also have the opportunity to read short stories and to write paragraphs in Chinese. (*1 credit*)

4281 Chinese IV: Advanced Language and Cultures (*Grades 11-12; Prerequisite: Chinese III or equivalent and recommendation of the department*) Students will start to develop more complex conversational skills with greater exposure to authentic Chinese spoken and written materials, as well as somewhat lengthier listening and reading materials. The topics in this year will include: planning a vacation, a trip report, visiting someone, health and fitness, banking, and moving. In this fourth year course, students will explore and discuss many cultural topics through Chinese movies, dramas and traditional performing arts. (*1 credit*)

4284 AP Chinese (*Grades 11- 12; Prerequisite: Chinese IV and recommendation of the department*) AP Chinese Language and Culture course is designed to provide qualified students with varied opportunities to further improve their proficiency in listening, speaking, reading and writing skills in Chinese. Students enrolled in this class will also have maximal exposure to Chinese cultural elements that are integrated in the process of learning the language. Through student-centered activities,

students develop skills in using Chinese to comprehend, compare and contrast issues and ideas that are pertinent to their life and community. AP Chinese is a yearlong course that is equivalent to approximately 250 hours of content of a college Chinese course. The class will be conducted almost exclusively in Chinese. Students are required to speak Chinese as much as possible in all situations. All students enrolled in the class will be expected to take the AP language exam in May. (*1 credit*)

## **FRENCH**

4020 French II (*Grades 9-10; Prerequisite: French I or equivalent*) Conducted primarily in French, this course develops students' speaking and writing skills. Students master increasingly complex sentence structures and expand their active vocabulary. They study the culture, geography, and history of the French-speaking world through reading, films, web-based assignments, and at least one local field trip. Students will practice their speaking and listening comprehension skills in our state-of-the-art language lab. Evaluation will be based on progress in all four skills: reading, writing, listening, and speaking. In addition to periodic assessments during the school year, there is a comprehensive final exam. (*1 credit*)

4021 Honors French II (*Grades 9-10; Prerequisite: French I with a grade of A- or higher and recommendation of the department*). Conducted in French, this course offers students who have a solid level I foundation in all four language skills a curriculum that strengthens that foundation with enriched vocabulary and grammar study while exploring new grammar and thematic material through texts, literature, art, film and current events of interest. French 2 Honors is the second course of a five part French series designed to empower students to learn to speak, read, write and comprehend French in a culturally authentic manner. Built on the National Foreign Language Standards, this is a comprehensive course integrating content, varied methodology and interactive activities. Students have the opportunity to communicate in French through traditional exercises including essay writing, listening activities and oral reports. They can also pursue topics of personal interest and share their work on a classroom blog and online newspaper. Pronunciation is emphasized. In addition to frequent written and oral assessments, there is a comprehensive final exam. The course offering is dependent upon sufficient student numbers. (*1 credit*)

4040 French III (*Grades 10-12; Prerequisite: French II or equivalent*) Conducted primarily in French, this course features the continued exploration of France and the Francophone world through journalism, literature, art, and film. Cultural awareness and listening comprehension are developed with video and audio materials. Grammar is introduced and reinforced through regular writing assignments and oral activities. Web-based assignments are offered to reinforce and enrich classroom activities. Students are encouraged to communicate in French during class. Laboratory exercises help to refine pronunciation and reinforce speaking and listening skills. Evaluation is based on consistent effort as well as progress in reading, writing, speaking, and listening. Written tests, oral evaluations, and a comprehensive final exam are used to assess student progress. (*1 credit*)

4050 Honors French III (*Grades 10-12; Prerequisite: French II with a grade of A- or higher and recommendation of the department*). Conducted in French, this course offers the more advanced French student the opportunity to explore French and Francophone culture through journalism, literature, art, and film. Increasingly complex grammar is introduced and practiced in regular short essays and oral reports. Web-based assignments allow students to explore themes of personal interest, building vocabulary essential to the topic. Students are expected to communicate in French at all times during class. Laboratory exercises help to refine pronunciation and reinforce speaking and listening skills. Evaluation is based on progress in all four skills: reading, writing, speaking, and listening. Students will read two short novels. In addition to regular written and oral assessments, there is a comprehensive final exam. (*1 credit*)

4060 French IV: Language and Cultures (*Grades 11-12; Prerequisite: French III or equivalent*) Conducted primarily in French, this course emphasizes continued development of conversation and writing skills, largely through the study of Francophone films, short stories, comic books, and visual art. This varied approach sharpens oral proficiency and broadens cultural awareness. Students complete independent multi-media research projects, which they share orally with the class. Evaluation is based on progress in all four skills: reading, writing, listening, and speaking. (*1 credit*)

4070 Honors French IV (*Grades 11-12; Prerequisite: Recommendation of the department*) This course is designed to offer students the opportunity to improve their fluency in French and to expand their understanding and appreciation of the culture, ideas, traditions and challenges facing the modern francophone world. Intensive [and enjoyable!] practice in listening,

speaking, reading, writing and grammar will center around the following themes: *Les Défis mondiaux, science et technologie, vie contemporaine, la quête de soi, famille et communauté, l'esthétique*. Literary texts, film, contemporary and classical music, newspapers and web resources are used to explore each thematic unit. Tests, oral evaluations, partner work and quizzes provide benchmarks to evaluate student progress and mastery of the material. Students will have the opportunity to participate in a class blog and explore specific topics of interest in greater detail. The goal for each student is predicated on steady personal progress and improvement, based on his/her level of proficiency in September. Conducted entirely in French, IVH gives students the opportunity to “immerse” in the language for at least forty minutes every day. Coming to class prepared and with an enthusiastic mindset is, in itself, worth its weight in gold! Students’ motivation, consistency, curiosity and interest are the cornerstones for this course. There is a cumulative final in June. (*1 credit*)

4081 French Senior Seminar (*Grades 11-12; Prerequisite: French IV or equivalent*) This is an advanced sociolinguistic seminar based on the four fundamental language skills to help students expand their listening, reading, speaking, and writing in practical, real-world contexts. The essential proficiency goal is the ability to produce French in a natural, creative, and authentically communicative way. All narrative and media selections are appropriately updated to reflect a wide array of Francophone and interdivisional topics such as current events, technology, the environment, sustainability, social and political issues, bilingualism, entertainment, as well as students' own personal interests. Above all, students' daily contributions and interactions are paramount to their personal development and proficiency while maintaining the integrity and aims of the course. (*1 credit*)

4090 AP French Language and Culture (*Grades 11- 12; Prerequisite: French IV Honors and recommendation of the department*) Following closely upon the French IV Honors course, this AP French V course continues to refine students' reading, writing, speaking, and listening skills in preparation for the new AP French language exam in May. The syllabus is divided thematically between six units: 1) Family and Community, 2) Science and Technology, 3) Contemporary Life, 4) Personal Quests, 5) Beauty and Aesthetics, and 6) Our Threatened Planet. Within each thematic unit, students read current newspaper and magazine articles, listen to radio shows, watch short newscasts, read short literary texts and watch short film clips of thematic relevance. In addition, students practice the multiple choice listening and reading comprehension questions, and the presentational and interpersonal writing and speaking exercises that constitute the bulk of the new AP exam. All students enrolled in the class will be expected to take the AP language exam in May. (*1 credit*)

4095 Post-AP French and Francophone Literature and Culture (*Grade 12; Prerequisite: Advanced Placement French*) This conversation and writing course is developed around six topical and enduring themes: Personal relationships, Media and technology, Generations, Nature and environment, Society, Travel and transport. Each theme is explored in the context of history, literature and film. Grammar and vocabulary are integrated within the framework of these resources, allowing students to strengthen and reinforce their increasing fluency. There will be a series of evaluations throughout this year long course. Students will prepare to take the DELF B2 (Diplôme d’Etudes en Langue Francaise) in the spring. Students will develop/maintain a blog that will be available to all FA French students for communication and inspiration! Class participation and daily commitment to communication in French are essential to a successful experience in this class. No English is spoken. (*1 credit*)

## **SPANISH**

4100 Spanish I (*Grades 9-10*) Conducted mostly in Spanish, this course focuses on building basic communication skills in diverse situations and topics while introducing students to the Hispanic world. Students learn to socialize, provide and obtain information, express personal feelings and get others to adopt a course of action in Spanish. Evaluation emphasizes comprehension and building listening and speaking skills, while laying a foundation for the mastery of reading and writing at higher levels. In addition to periodic assessments during the school year, there is a comprehensive final exam. (*1 credit*)

4110 Spanish II (*Grades 9-10; Prerequisite: Spanish I or equivalent*) Conducted primarily in Spanish, this course develops the students’ active vocabulary, improves mastery of increasingly complex sentence structure, and develops each student’s ability to speak and write creatively. Students develop a greater appreciation of the breadth and variety of the Spanish-speaking world through cultural readings, projects, films, and at least one local field trip. Listening comprehension is practiced with video and audio materials. Evaluation is based on progress in all four skills: reading, writing, listening, and speaking. In addition to tests and quizzes, there is a comprehensive final exam. (*1 credit*)

4111 Honors Spanish II (*Grades 9-11; Prerequisite: Spanish I with a grade of A- or above, National Spanish Exam, placement test & recommendation of the department*) This is an accelerated Spanish II course designed for the more advanced language student who has demonstrated exceptional ability and achievement in the first level. Intensive study of listening, reading, speaking, and writing skills is supplemented by outside reading to provide an introduction to Spanish literature. The course demands the student's constant participation in the target language in order to strengthen his or her language proficiency. Video and audio materials are also an integral part of the course. In addition to regular in-class assessments, students will take the National Spanish Exam given in the spring by the AATSP (American Association of Teachers of Spanish and Portuguese), as well as a cumulative final exam in June. The student who completes this course successfully may be recommended for Spanish III Honors. (*1 credit*)

4120 Spanish III (*Grades 10-12; Prerequisite: Spanish II or equivalent*) Conducted in Spanish, this course continues to build students' language skills in the four areas of listening, speaking, reading, and writing. Students continue to study grammar, focusing on advanced idioms and all verb tenses. The course also introduces some aspects of Peninsular and Spanish-American history and contemporary culture, primarily through readings from a variety of sources and some projects. Video and audio materials are used to improve listening comprehension skills. In addition to quizzes, tests, oral evaluations and some short essays, there is a comprehensive final exam. (*1 credit*)

4129 Honors Spanish III (*Grades 10-12; Prerequisite: Spanish IIIH with a grade of A- or higher and recommendation of the department; Spanish II with a grade of A or higher and recommendation of the department*). This is an accelerated Spanish III course designed for the more advanced language student. Conducted in Spanish, the course's primary focus is the mastery of the most integral grammar points and the development of more complex language skills in all areas of language learning. The course demands the student's constant participation in all activities designed to strengthen language proficiency. The course also includes a cultural component, which integrates literary and non-literary selections and popular films, to provide exposure to important aspects of Peninsular and Spanish-American history and culture. Evaluation is based on progress shown in all four language skills: reading, writing, listening and speaking. In addition to regular in-class assessments, students will take the National Spanish Exam given in March by the AATSP (American Association of Teacher of Spanish and Portuguese). There is also a comprehensive final exam in June. (*1 credit*)

4130 Spanish IV: Language and Cultures (*Grades 11-12; Prerequisite: Spanish III or equivalent*) Conducted in Spanish, this course focuses on developing key communicative skills in the language, with a particular focus on listening and speaking. Audio and video materials and readings from current periodicals are used to teach culture and to improve listening and reading comprehension skills. Students are required to speak Spanish in class at all times. Grammar is reviewed contextually on a regular basis. In addition to quizzes and tests, there is a final exam. (*1 credit*)

4135 Honors Spanish IV (*Grade 11-12; Prerequisite: Spanish IIIH with a grade of A- or higher and recommendation of the department; Spanish III with a grade of A or higher and recommendation of the department*). Conducted in Spanish, this course is designed as a preparation for the Advanced Placement Spanish Language course. In addition to continuing to develop language proficiency in all four skill areas (reading, writing, listening, and speaking), students also develop an awareness of Peninsular and Spanish-American culture through the study of literature, visual arts, music, film, and current periodicals. Video and audio materials are used to improve listening comprehension. Grammar is reviewed contextually on a regular basis. Evaluation is based on progress in all four skills. In addition to quizzes and tests, there is a final exam. (*1 credit*)

4141 Spanish Senior Seminar (*Grade 11-12; Prerequisite: Spanish IV or equivalent*). This is an advanced sociolinguistic seminar based on the four fundamental language skills to help students expand their listening, reading, speaking, and writing in practical, real-world contexts. The essential proficiency goal is the ability to produce Spanish in a natural, creative, and authentically communicative way. An anthology of authentic resources such as newspapers and magazine articles, as well as critically acclaimed films and popular audio recordings will be used as supplemental materials to provide students with a better multicultural understanding and broader global perspective. All literary selections are from major Spanish, Latin American, and U.S. periodicals and newsmagazines. Moreover, all media selections are appropriately updated to reflect a wide array of interdivisional topics and applications such as current events, technology, the environment, sustainability, social and political issues, bilingualism, entertainment, the immigrant experience and Hispanic-American perspective, as well

as students' own personal interests. Above all, students' daily contributions and interactions are paramount to their personal development and proficiency while maintaining the integrity and aims of the course. (1 credit)

4142 AP Spanish (Grade 11-12; Prerequisite: Spanish IV Honors with a grade of A- or higher and recommendation of the department) Conducted in Spanish, this course continues developing the four skills (reading, writing, listening and speaking) and an awareness of Peninsular and Spanish-American culture through the study of literature, current periodicals and news media, and at times, music and visual arts. Oral presentations are also frequent. Video and audio materials are used to improve listening comprehension. Grammar is reviewed contextually on a regular basis. Evaluation is based on progress in reading, writing, listening, and speaking. In addition to tests and quizzes, students are expected to take the AP Spanish Language exam in the spring. (1 credit)

## **LATIN**

4160 Latin II (Grades 9-10; Prerequisite: Latin I or equivalent) This course continues where Latin I left off. Increasingly complex grammatical forms and constructions (such as the subjunctive) are introduced, and the emphasis on vocabulary, derivatives, and Roman culture continues. Students read a considerable amount in Latin, as well as some ancient mythology. There are frequent quizzes and periodic tests as well as a comprehensive final exam. (1 credit)

4170 Latin III (Grades 10-12; Prerequisite: Latin II) After the students have completed the study of virtually all the grammar and syntax they will need (such as indirect discourse), the course focuses on reading excerpts of Latin authors (eg., Ovid) and on some preparation for the Advanced Placement Latin examination. Much attention is given to the close reading of poetry, with particular emphasis on scanning, the use of rhetorical figures, and close textual analysis. There are frequent quizzes and periodic tests, and there is a comprehensive final exam. (1 credit)

4180 Latin IV: Advanced Language and Cultures (Grades 10-12); Prerequisite: Latin III and recommendation of the department) Latin IV is the first half of a two year course designed to prepare students for the AP Latin exam. Students who successfully complete the course will be able to enroll in AP Latin V the following year. During the first semester of Latin IV, students will review all of the grammar that they learned in Latin I-III and will build up their Latin vocabularies through frequent quizzes. We will cover about three Wheelock chapters a week during the first semester as we review material. In the second semester of Latin IV, students begin the AP Latin syllabus by reading selections from Julius Caesar's *De Bello Gallico*. In addition to the *De Bello Gallico*, there will be supplemental readings from Tacitus' *Germania*, an ethnographical 1st century A.D. Latin treatise on the tribes which inhabited Germany during the Roman imperial period. The main focus of the second half of Latin IV will be on examining Roman attitudes towards non-Roman cultures and peoples as depicted in these two texts. Much attention will also be paid to the grammatical and stylistic features of Latin prose, including rhetorical and stylistic devices used by Caesar and Tacitus. In addition, the World Languages and Cultures Department will be sponsoring an archaeological dig at a Roman site near the Mediterranean to supplement the ethnographical aspects of the Latin IV and AP Latin V courses. (1 credit)

4192 AP Latin (Grades 10-12; Prerequisite: Latin IV and recommendation of the department) AP Latin is the second half of a two year course designed to prepare students for the AP Latin Exam. The overall goal of the course is to help students prepare to take the AP Latin Exam in May. We will complete the AP Syllabus by reading select Latin passages from Books 2, 4, and 6 of the Aeneid. We will also read select books of the Aeneid in English translation. As part of the preparation for the AP Latin exam, we will devote a great deal of class time to analyzing Vergil's Latin text (there will be numerous short essay writing assignments with questions from previous AP Latin exams). We will also practice sight-reading Latin prose and poetry passages, devote class time to discussing the historical background of the Aeneid, and look for ways in which we can draw connections between Vergil's poem and Julius Caesar's *De Bello Gallico*. (1 credit)

## **Full Year ½ Credit Courses**

4147 Introductory Latin (Grades 9-12; Prerequisite: recommendation of the department) Introductory Latin offers students who have successfully completed Introductory Latin an opportunity to study the basic grammatical concepts of the Latin language. The student in Introductory Latin will learn some of the fundamental grammatical and syntactical features of Latin

(case, gender, voice, mood, etc.) and will learn many English and Latin vocabulary words, as more and more complex stories are read and dramatized. Students who successfully complete the Introductory Latin course can continue their study of Latin with Advanced Introductory Latin. Students who wish to enroll in full-credit Latin II the following year must study and learn material related to Roman culture and mythology and pass a placement exam prior to enrollment in Latin II. Furthermore, any student who wishes to take two full-credit language courses at the same time (Latin and Spanish, for example) must get school approval to enroll in six full-credit classes. For more information, please speak with Dr. Davison or Dr. Duke. (*½ credit*)

4148 Advanced Introductory Latin (*Grades 9-12; Prerequisite: recommendation of the department*) Advanced Introductory Latin offers students who have successfully completed Introductory Latin a continuation of their study of the basic grammatical concepts of the Latin language. The student in Advanced Introductory Latin will continue to learn some of the fundamental grammatical and syntactical features of Latin (case, gender, voice, mood, etc.) and will learn many English and Latin vocabulary words, as more and more complex stories are read and dramatized. Students who successfully complete the Advanced Introductory Latin course and wish to enroll in full-credit Latin III the following year must study and learn material related to Roman culture and mythology and pass a placement exam prior to enrollment in Latin II. Furthermore, any student who wishes to take two full-credit language courses at the same time (Latin and Spanish, for example) must get school approval to enroll in six full-credit classes. For more information, please speak with Dr. Davison or Dr. Duke. (*½ credit*)

## ***GLOBAL STUDIES SCHOLARS PROGRAM***

Global citizenship at Friends Academy is rooted in the understanding that 'the peoples of the world are one people, enriched by individual differences and united by a common bond of humanity. Diversity in this world community is its greatest strength; understanding and respect are its greatest gifts.'

In an effort to nurture this understanding and to offer FA students an important opportunity to develop the sensitivity and the skills needed to become true citizens of the world, strong leaders, and generous humanitarians, the Global Studies Scholars Initiative has been developed. This program offers unique, project-based, interdisciplinary opportunities that allow students to delve thoroughly into research and experiential learning, responding to the course's *essential question*. Each GSS elective is inspired by the UN Millenium goals and informed by social action, social responsibility, and social justice.

Curricular expectations include:

- An essential question that directs all components of project;
- Collaboration;
- Sustained relationships with organizations, research centers, schools, institutions, etc. connected to the course topic;
- Creative problem solving;;
- Research and effective writing formats;
- Sustainable practice;
- Culmination materials including digital portfolios and oral articulation of the project;
- Workshops include:
  1. Preparation for Social Action
  2. Presentational speaking and persuasive argument
  3. seminars specific to the course project/content

### ***Full year Course***

5068 East Asian Studies (Grades 11,12) -This full year Global Studies elective will provide an in-depth examination of East Asia, focusing on the emergence and evolution of China, Japan, South Korea, and North Korea. After extensive examination of the historical, cultural, and religious foundations that emerged within each region, students will analyze modern social and political developments. The capstone project will be a weeklong mock East Asia Summit, which will deliberate over issues involving social equality, human rights, public health, economic development, environmental sustainability, disaster response, and nuclear non-proliferation. Leading up to the summit, each group will collaborate in researching the policies of their nation, composing position papers analyzing their nation's interests, and brainstorming potential committee partnerships and resolutions. In addition to organizing cross-cultural venues for discussion, students will take advantage of the academic and cultural institutions of New York City. Ultimately, by studying the foundation and evolution of East Asia, students will cultivate greater understanding of the contemporary issues shaping each nation, as well as their regional and global interactions. (1 credit)

### ***Spring Semester Course***

5069 The Philosophy of Being Human (Grades 11,12) This semester elective blended course [part online, part in class] will offer a comprehensive study of the influence that society and culture convey on an individual's understanding of the human condition and how that understanding influences, in turn, societal and cultural norms. Students will research, reflect upon, and discuss the concepts of beauty, truth, justice and the spiritual. Class members will collaborate in a thorough study of these topics, examined through the lenses of history, age, social condition and ethnicity. Each topic will be explored in five week units that encourage research and comparative analysis of the theme. Students will be responsible for selected readings from philosophers and representative of philosophical movements. They will expand class discussion through their own research and reflection, relying on both primary and secondary sources. Each unit will conclude in a collaborative milestone project. This course offers challenging opportunities to learn about the past, investigate the present, connect to a larger world vision, and better understand ourselves in the context of global awareness and citizenship. Students will prepare a final project in the spirit of the course's essential question. (½ credit)

## ***HONORS ARTS PROGRAM***

The Honors Arts program provides a forum for students with particular interest in the arts to engage more deeply in artistic and aesthetic inquiry through artistic experience, reading, research, and dialogue. This academically challenging program is designed to enhance cognitive thinking skills by connecting the individual arts experience to a larger concept of the role the arts play in our world

The program, which is to be taken *in addition to* regular visual and performing arts classes, is open to students in the eleventh and twelfth grades who have taken the required prerequisites in their artistic disciplines. Students must apply for and be accepted to the program and must maintain a 'B+' average overall in order to be eligible.

The program includes the following components:

- Each student will be assigned a mentor with whom he or she will meet on a regular basis.
- Each student will be required to keep a journal reflecting his or her creative process and growth as an artist.
- Students will attend a weekly seminar designed to develop their understanding of universal artistic concepts and generate dialogue about their arts experiences.
- Each student will be required to attend three planned events relating to the arts each semester.
- Each student will be required to propose, complete, and present one major project, or several smaller projects, each semester.

Applications for the Honors Arts Program are available on-line.

## ***PERFORMING ARTS – MUSIC***

The Upper School music program offers a four-year comprehensive and sequential curriculum in instrumental and vocal music. It is our goal in the music department to increase the musical ability of each player, to give each student the opportunity to work as part of an ensemble and to play publicly in concerts and other forums in a way that demonstrates a high standard of excellence for each individual player as well as the ensemble.

### **Full Year Courses:**

Wind Ensemble  
Jazz Band  
Orchestra  
Chamber Orchestra  
Vocal Ensemble  
Men's and Women's Choir  
Men's Choir Sectional  
Women's Choir Sectional  
Chamber Choir  
Music Theory  
AP Music Theory

### **Semester Courses:**

Music Appreciation  
Opera Appreciation

### **Course Descriptions**

6306 Wind Ensemble (*Grades 9-12 Prerequisite: Students should be able to play their chosen instrument at a NYSSMA*

*level 4 or above. Audition required.*) This course functions as a large performing group, with most classes taking the form of a rehearsal. Emphasis is placed on developing skills as outlined in the Standards of Excellence. Students build upon previous instrumental training through a repertoire of appropriately challenging music. Curriculum is directed not only toward the technical advancement of the students, but also toward their understanding of musical content, structure, and style. The Ensemble will participate in concerts in December and May. *(Full Year; ½ Credit)*

6308 Jazz Band *(Grades 9-12 Prerequisite: Students should be able to play their chosen instrument at a NYSSMA level 4 or above. 9th graders must also be enrolled in Wind Ensemble. Audition required.)* This performance-based course emphasizes the various styles of jazz, blues, and rock. The course will introduce improvisation and appropriate stylistic concepts. Participation in this ensemble provides an outlet for individual creativity and expression while relating the importance of the individual performer to the success of the group. This group performs several times throughout the year. *(Full Year; 1/2 Credit)*

6309 Orchestra *(Grades 9-12 Prerequisite: Students should be able to play their chosen instrument at a NYSSMA level 4 or above. Audition required.)* This course functions as a large performing group, with most classes taking the form of a rehearsal. Emphasis is placed on developing skills as outlined in the Standards of Excellence. Students build upon previous instrumental training through a repertoire of appropriately challenging music. Curriculum is directed not only toward the technical advancement of the students, but also toward their understanding of musical content, structure, and style. The Ensemble will participate in concerts in December and May. *(Full Year; ½ Credit)*

6305 Chamber Orchestra *(Grades 9-12 Students must be enrolled in Orchestra. Audition required.)* Members of the Chamber Orchestra are challenged to learn and perform repertoire created especially for small string groups. Students are expected to learn the music on their own and the class meeting time functions as a professional rehearsal would. This class is aimed at expanding the musical knowledge of our most advanced string musicians and teaching them to be a part of a small professionally oriented performing ensemble or college orchestra. One section of this meets before school. *(Full Year; 1/4 Credit)*

6310 Vocal Ensemble *(Grades 9-12)* Vocal ensemble meets during the school day and studies a variety of music. There is a focus on ear training, sight singing and part singing as well as vocal techniques and development of the standards of excellence. This course provides students a vocal foundation that will prepare them to take the Music Theory course or audition for the Men's and Women's Choir. There are optional performance opportunities as part of this class. *(Full Year; ½ Credit)*

6335 Men's and Women's Choir *(grades 9-12 Audition Required.)* Men's and Women's Choir meets three mornings a week before school. The course studies and performs intermediate to advanced choral repertoire for mixed voices. Students focus on rehearsal techniques, reading music, vocal production and group dynamics. This choir is the primary vocal group that performs at the winter and spring concert. *(Full Year; ½ credit)*

6303 Chamber Choir *(Grades 9-12 Audition required.)* This small ensemble. (8-16 students) meets one morning a week before school. The focus of the group is to have an opportunity to learn challenging material created specifically for small ensembles. This group performs throughout the year both at formal concerts and in more informal settings. Students in this group must also be enrolled in Concert Choir. *(Full Year; 1/4 Credit)*

6350 Music Theory *(Grades 9-12)* This course will provide a foundation of music theory for the intermediate level musician that will prepare them for advanced study. It is designed for performing musicians (piano, instrumental, vocal) to deepen their knowledge of the musical idiom. The course work includes written concepts, terminology and notation, exercises in music reading and sight singing, practice in ear training, and work in analysis and composition. This class meets five out of ten times in a two week period and fulfills the prerequisite for the AP Music Theory Course. Regular quizzes, exams, and compositional projects are given throughout the term. Students must be able to pass a basic entrance exam in order to be part of this course. *(Full year; ½ Credit)*

6352 AP Music Theory *(Grade 11-12; Prerequisite Music Theory or independent study Music Theory and passing the entrance exam with a B or better)* For serious music students who plan to pursue music as part of their college course of

study. Students must be proficient on their instrument or voice. The course work includes advanced work in written concepts, terminology and notation, exercises in music reading and sight singing, practice in ear training, and work in analysis and composition. This course meets every day. The coursework will prepare the students for the Music Theory Advanced Placement examination. (*Full year; 1 Credit*)

6288 Music Recording Technology (*Grades 10-12*): This one semester course covers the fundamentals of computer-based music recording, mixing, and production. Using Apple's *Garage Band* software, MIDI controller keyboards, and real instruments and voices students learn to create and manipulate MIDI sequences and digital recordings to create finished compositions. The whole recording process is studied, from concept to production, to give students the tools to capture their musical ideas. Study is independent in nature. The course meets 5 out of 10 classes per two week cycle and additional time in the electronic music classroom may be required to complete assignments. Musical talent or experience with a musical instrument is not required for success in this course. This course may be applied to either Technology or Arts credit. (*Semester Course; ¼ credit*)

6353 Music Appreciation (*Grades 9-12*) This course is a yearlong introduction to Western classical music from Gregorian chant to 20<sup>th</sup> century contemporary music. We listen to significant works from the Middle Ages; the Renaissance; the Baroque, Classical, Romantic periods; and the 20<sup>th</sup> century. We not only look at stylistic characteristics of each period and the variety of forms of musical expression, but we also look at the lives of famous composers such as Monteverdi, Handel, Haydn, Mozart, Beethoven, and Brahms. No prior knowledge of music is necessary. Classes meet once a week, and there is one paper and one exam required per term. (*Full Year; ¼ Credit*)

6355 Opera Appreciation (*Grades 11-12*) This year long, once-a-week lunch period class presents a variety of operas from the Baroque, Classical, Romantic, and contemporary periods as well as to represent national (French, German, Italian, Russian, or English) differences. Anyone is welcome who has an interest in learning more about opera by simply being exposed to it. No prior knowledge is needed, as a brief introduction to operatic and musical conventions of the period will be reviewed. Bring your lunch! There will be one paper per semester on an opera of choice. (*Full Year; ¼ Credit*)

## ***PERFORMING ARTS – THEATER AND DANCE***

The Upper School program offers a four-year curriculum that lays a foundation of the basic elements of theater and dance and is sequenced through advanced study in the Junior and Senior years. Four years of study are offered in Dance, Stagecraft and Technical Theater, and the study of theater with an emphasis on acting technique.

### **Full Year Courses**

Dance I/II

Advanced Expressions in Dance I/II

Theater Studies

Performing Arts

Advanced Performance Studies: Acting and Directing

Advanced Performance Studies: History and Literature

Stagecraft Apprenticeship Program

### **Semester Courses**

Stagecraft

Creative Projects

Playwriting

## Full Year Course Descriptions

### 6721 Dance I

### 6722 Dance II

Dance is a strong choice for students who enjoy movement and are interested in expanding their movement vocabulary. Students with a love of dance are welcome, whatever their background in technique. (Ballet Jazz, Modern, Tap, Lyrical, Hip Hop, Street, etc.) Students will come together to learn more about the body in motion and the creative process. These classes may be applied to either PE or Art requirements. *(Full Year; 1/2 credit)*

### 6720 Advanced Expressions in Dance I

### 6723 Advanced Expressions in Dance II

*(Prerequisite: Dance I and II or department approval)* Advanced Expressions in Dance may be taken for two years. The class is an intense study in technical and choreographic skills. Students develop a personal creative process, choreograph, and learn repertoire. This course may be applied to either PE or Art requirements. *(Full Year; 1/2 credit)*

6362 Theater Studies *(Grade 9)* This course is a solid jumping off point for both the serious theater student and the student who is interested in increasing their skill level and perhaps participating in school plays. The curriculum emphasizes the exploration of literary structure, dramatic context, character development, and improvisation. *(Full Year, 1/2 credit)*

6364 Performing Arts *(Grade 10; Prerequisite: Theater Studies or departmental approval)* In this course the students take the skills learned in Theater Studies and begin to focus on script analysis, character development, understanding of subtext, and the Stanislavskian principles of acting. The course develops aesthetic awareness and an understanding of the concepts, elements, principles, and theories of performance. Throughout the year students learn to give and receive honest feedback in preparation for the directing work to follow. *(Full Year; 1/2 credit)*

### 6357 Advanced Performance Studies I

### 6358 Advanced Performance Studies II

*(Grades 11-12; Prerequisite: Performing Arts or department approval)*

Advanced Performance Studies I & II are designed to work together as a comprehensive two year curriculum that will meet the expectations of both the students who want to further their own knowledge and enjoyment of the theater and the students preparing themselves for rigorous college arts programs. Drawing upon history, literature and styles of acting and directing, students work to develop a comprehensive philosophy and approach to their work as a creative artist. Students may take one class and not the other, but are encouraged to take the full two years in order to experience the cumulative curriculum. *(1 credit per year)*

### 6374 Advanced Performance Studies: History and Literature

History and Literature begins with the origins of western theater and traces its development through modern drama. The course looks at major historical events and the role theater played in influencing and interpreting those events. Simultaneously we examine the major plays from each era, engaging in script analysis and interpretation of those plays in light of the events they arose from and their application to modern society. *(Full Year; 1 credit)*

### 6375 Advanced Performance Studies: Acting and Directing

Acting and Directing explores the major movements that have developed in American acting technique over the last 125 years. Beginning with the influences of Constantine Stanislavski, the course draws from major practitioners such as Sanford Meisner, Stella Adler, Uta Hagen and Anne Bogart. Students are also introduced to the fundamentals of directing and playwriting through research, writing and performance. *(Full Year; 1 credit)*

## Semester Course Descriptions

### 6376 Stagecraft Apprenticeship Program

Once a student has completed stagecraft he/she may apply for the Stagecraft Apprenticeship Program. This program is

designed for the serious student who wishes to do in depth work in all areas of stagecraft including set building, lighting, sound, costumes, special effects, stage management and production and design. Students will work closely with a mentor to design an individualized program of study. Students will be responsible for documenting their progress and creating a portfolio of their work. the students portfolio must be presented in order to complete each level of the Apprenticeship. Each level of the apprenticeship requires completion of a minimum of 80 hours. Honors designations can be earned through additional design or leadership components. Admittance to the Stagecraft Apprenticeship Program is by application only. *(Semester course, ¼ credit.)*

#### 6366 Stagecraft

This course is designed for the student who has an interest in how things work, how things go together, and what makes things run. Starting from the beginning by exploring the theater space and how it works, students then move on to learning to choose and use hand and power tools and simple carpentry skills. The class is rounded out by learning about the rudiments of sound, electrics and rigging. The course is entirely hands on. *(Semester course, ¼ credit.)*

#### 6379 Creative Projects ( Performing Arts) *(Grade 12-there is no prerequisite for this course)*

This semester long course is for seniors who have an interest in creating their own works. Through a series of comprehensive creative projects, students will design and execute projects which respond to prompts and queries. This is a production based class, in which students will be responsible for all elements of their projects from inception to execution. Students will work both individually and in groups. *(Semester course, ¼ credit.)*

#### 6375 Playwriting *(Grade 12-there is no prerequisite for this course)*

This semester long course will look at the building blocks of playwriting, including character development, story, thematic unity, style, structure and voice. Students will write monologues, scenes and one-act plays. This course is suitable for students both with and without playwriting experience. Students will be able to submit their work from this class to be performed in *Originalworks*. *(Semester course, ¼ credit.)*

## ***VISUAL ARTS***

Students enrolled in visual arts classes in the Upper School explore the elements and principles of visual art through a wide variety of media and techniques, develop and expand their artistic voice, and refine their creative and conceptual visions. A variety of courses are offered, from the most basic overview in Studio Art I all the way to Advanced Placement Portfolio levels. In addition to studio projects, students are asked to participate in critiques and dialogues on art history.

Students are evaluated based on their effort and participation in class, quality of finished product, originality of thought, and demonstrated understanding of concepts presented. Student art is often displayed in the gallery and common areas and is returned after it has been on exhibit.

### **Full-Year Courses**

AP Studio Art Portfolio (1 credit)

### **Semester Courses**

Studio Art I *(required for all studio courses)*

Studio Art II *(required for any student wanting to take advanced studio courses)*

Studio Explorations I, Studio Explorations II

Studio Art I, II

Photo I, II

Drawing, Advanced Drawing

Painting, Advanced Painting

Printmaking, Advanced Printmaking

Design, Advanced Design

Ceramics I, Ceramics II

## Course Descriptions

6100 Studio Art I (*Grade 9*) This course is designed to help students become visual problem solvers through the use of various techniques and materials which encompass: drawing, painting, printmaking, and 3D design. They will learn how to express their ideas as well as gain experience for other art courses they might take in the future. It is the prerequisite for all other visual art courses. (*semester course, ¼ credit*)

6102 Studio Art II (*Grade 10; Prerequisite: Studio Art I*)

This course continues to aid students in becoming visual problem solvers while gaining experience necessary for advanced level studio art courses. They will have the opportunity to work with advanced techniques and new materials in order to better express themselves. A variety of materials and techniques will be introduced to the student. It is a required course for any student interested in continuing in the visual arts. (*semester course, ¼ credit*)

6101 Studio Explorations I (*Grade 9, 10; Prerequisite: Studio Art I*)

This course further explores techniques and materials experienced in Studio Art I while encouraging students to develop an artistic voice within their creative work. They will be researching artists and artistic styles in order to deepen their visual vocabulary and aid in visual problem solving. It is a required course for any student considering taking AP Studio Art and highly recommended for any student interested in visual arts. (*semester course, ¼ credit*)

6103 Studio Explorations II (*Grade 10; Prerequisite: Studio Art I, Studio Art II*)

This course further explores techniques and materials experienced in Studio Art II while encouraging students to further develop an artistic voice within their creative work. They will be researching artists and artistic styles in an effort to deepen their visual vocabulary and aid in visual problem solving. It is a required course for any student considering taking AP Studio Art and highly recommended for any student interested in visual arts. (*semester course, ¼ credit*)

*\*After completion of this course, students may opt to continue in any of the specialized courses the following semester. Therefore, students who have a strong interest in the Visual Arts are encouraged to request Studio Art II in the first semester so the option of continuing is available to them.\**

6183 Drawing (*Grades 11, 12; Prerequisites: Studio Art I & II*) Concepts and skills in drawing are acquired through beginning-level drawing problems in line, shape, plane, form, space, tone, and gesture. Students develop personal expression and aesthetic, visual, tactile and kinesthetic sensitivity. Analytical and intuitive thinking with various materials and subjects are required. (*semester course, ¼ credit*)

6182 Advanced Drawing (*Grades 11, 12; Prerequisites: Studio Art I, Studio Art II*) Students are expected to attempt more challenging work and expand their repertoire by “pushing the envelope” of drawing, with a greater emphasis on abstract composition. (For AP students, successful pieces may be used in the Breadth section of their portfolio.) Discussion of AP portfolio expectations. Weekly sketchbook assignments. (*semester course, ¼ credit*)

6185 Painting (*Grades 11, 12; Prerequisites: Studio Art I, Studio Art II, Studio Explorations I or II*) An introduction to the materials and subject possibilities of oil painting, with an emphasis on composition, painting techniques and color. (For AP students, successful pieces may be used in the Breadth section of their portfolio.) Weekly sketchbook assignments. (*semester course, ¼ credit*)

6187 Advanced Painting (*Grades 11, 12; Prerequisite: Painting*) Continuing to build on skill development and visual problem solving through painting, students are expected to attempt more challenging work and explore visual problems of greater complexity. (For AP students, successful pieces may be used in the Breadth section of their portfolio.) Discussion of AP portfolio expectations. Weekly sketchbook assignments. (*semester course, ¼ credit*)

6281 Printmaking (*Grades 11,12; Prerequisites: Studio Art I & II*) Expanding printmaking skills and techniques, students are expected to attempt more challenging work and explore visual problems of greater complexity. Students will be evaluated based on effort and participation in class, quality of finished product, and originality of thought as regards problem solving. In addition, completion of weekly sketchbook assignments are counted toward a final grade. Students will be required to

document ideas in their sketchbooks. *(semester course, ¼ credit)*

6284 Advanced Printmaking (Grades 11, 12; *Prerequisite: Printmaking*)

Expanding printmaking skills and techniques, students are expected to attempt more challenging work and explore visual problems of greater complexity. Students will be evaluated based on effort and participation in class, quality of finished product, and originality of thought as regards problem solving. In addition, completion of weekly sketchbook assignments are counted toward a final grade. Students will be required to document ideas in their sketchbooks. *(semester course, ¼ credit)*

6260 Photography (Grades 10-12; *Prerequisite: Studio Art I & II*) This course is designed for those who are interested in learning about black and white photography. Beginning with a survey of the historical development of photography, students will learn the fundamentals of the medium, from basic camera operation and darkroom techniques to the “rules” of composition. Through class projects, students will gain a solid understanding of various photographic techniques and will learn to use those techniques effectively to express their personal visual ideas. Class critiques and the study of masters' work are to promote discriminating technical and artistic judgment. *A manual-option 35mm SLR camera is required.* *(semester course, ¼ credit)*

6263 Advanced Photography (Grades 11,12; *Prerequisite: Photography*) As a continuation of Photography, this course enables students to further develop their visual strengths in photography as they sharpen their technical skills. Each class project is designed to target a specific photographic issue of either technical or expressionistic importance. Students will explore various creative darkroom techniques as well as ways in which to best express their individual ideas. Students will also continue to develop their analytical skills as they participate in class critiques and study the work of master photographers. *A manual-option 35 mm camera SLR camera is required.* *(semester course, ¼ credit)*

6820 Design (Grades 10-12; *Prerequisite: Studio Art I & II*) This course is designed to foster an understanding of two and three dimensional art forms through the elements and principles of design. Students are introduced to numerous materials and concepts and will work with plaster, wood, clay, foamboard, fabric, and found objects. Proper tool usage is developed through a series of assigned projects, and personal expression is encouraged. *(semester course, ¼ credit)*

6823 Advanced Design (Grades 11, 12; *Prerequisite: 3D Design*) As a continuation of Design, this course will offer students the opportunity to develop their ideas further through both 2D and 3D projects that address the elements and principles of design. *(semester course, ¼ credit)*

6220 Ceramics (Grades 11, 12; *Prerequisite: Studio Art I & II*) A beginning studio course introducing students to the properties of clay, hand building techniques, the potter's wheel and glazing. These techniques are used for personal creative expression within a structured format. *(semester course, ¼ credit)*

6221 Advanced Ceramics (Grades 10-12; *Prerequisite: Ceramics*) Students will explore the potential of clay through a variety of sculptural, decorative and utilitarian approaches. Materials, processes and techniques include coil, slab, use of drape molds, sculpture, throwing on the wheel, hand building, glazing and firing. A series of assigned projects will facilitate each student's understanding of clay aesthetics, but there is room for self expression. *(semester course, ¼ credit)*

6024 \*AP Studio Art Portfolio (Grade 12; *Prerequisites: starred courses below / permission of Dept Chair*) This course provides an enriching and challenging studio situation for the highly motivated and advanced art student. The emphasis is on the preparation and development of a portfolio under the guidelines set forth by the College Board, and students are required to explore a wide variety of styles and techniques. Sketchbook and written assignments are given, completion of which will require time spent outside of class. Students will each prepare and mount an exhibit in the gallery in May. Students will be expected to work with the teacher in maintaining a digital portfolio of their artwork for submission to the College Board in May. The digital portfolio may be used by the student as supplemental material for college applications. *(Full Year; 1 credit)*

## **Recommended Courses for AP Portfolio:**

### **Drawing focus**

9 <sup>th</sup> grade:	Studio Art I
9 <sup>th</sup> grade:	Studio Explorations I
10th grade:	Studio Art II
10th grade:	Studio Explorations II
11th grade:	Drawing
11th grade:	Advanced Drawing
12th grade:	AP Studio Art Portfolio ( <i>Full Year</i> )

### **2-D Design focus**

9 <sup>th</sup> grade:	Studio Art I
9 <sup>th</sup> grade:	Studio Explorations I
10th grade:	Studio Art II
10th grade:	Photography or Studio Explorations II
11 <sup>th</sup> grade:	Advanced Photography or Design or Printmaking
11th grade:	Advanced Photography or Advance Design or Advance Printmaking
12th grade:	AP Studio Art Portfolio ( <i>Full Year</i> )

### **3D Focus**

9 <sup>th</sup> grade:	*Studio Art I
9 <sup>th</sup> grade:	Studio Explorations I
10th grade:	*Studio Art II
10th grade:	*Studio Explorations II or Ceramics or Design
11 <sup>th</sup> grade:	*Design or Ceramics
11th grade:	*Advanced Design or Advanced Ceramics
12th grade:	AP Studio Art Portfolio ( <i>Full Year</i> )

## ***DIGITAL ARTS***

The Upper School Digital Arts program offers students the opportunity to immerse themselves in experiences with digital technology that will not only build technical skills but also work to help each individual develop their own unique voice. The program we create will allow students to explore both the current standards of the field as well as emerging technologies.

### **Semester Courses**

Graphic Design I, II  
Digital Arts  
Music and Recording Technology  
Intro to Digital Video  
Digital Video (Documentary)  
Digital Video (Narrative Short Story)  
Creative Projects (Digital Arts)

*All Courses can be used for either Arts or Technology Credit.*

### **Course Descriptions**

6810 Graphic Design I, 6811 Graphic Design II (*Grades 9-12*): This one semester course takes you through the design process from beginning to end, integrating concept generation, technical knowledge, design theory and studio skills at every step. Students work with typography, color theory, linear and aerial perspective, and the elements of design using the most up to date software and technologies. Students will demonstrate their progress through individual projects, presentations, and group critique. Graphic Design II continues to build on the skills developed in level I. (*Semesters 1 and 2; ¼ credit*)

6291 Digital Arts (*Grades 9-12*) This course will explore the many facets of Digital Arts. Working with a variety of new media, students will learn about the many possibilities of the computer as a primary tool in the art making process. Whether students are just beginning to explore the world of digital arts or expanding their existing knowledge base, this course will prepare students to incorporate digital work in their artistic, academic, and personal pursuits. Students will work individually as well as in groups in this primarily project based class.

(Semesters 1 and 2; ¼ credit)

6288 Music Recording Technology (*Grades 9-12*) This one semester course covers the fundamentals of computer-based music recording, mixing, and production. Using Apple's Garage Band software, MIDI controller keyboards, and real instruments and voices students learn to create and manipulate MIDI sequences and digital recordings to create finished compositions. The whole recording process is studied, from concept to production, to give students the tools to capture their musical ideas. Study is independent in nature. The course meets 5 out of 10 classes per two-week cycle and additional time in the electronic music classroom may be required to complete assignments. Musical talent or experience with a musical instrument is not required for success in this course.

(Semesters 1 and 2; ¼ credit)

6292 Intro to Digital Video (*Formerly 6283 Film Techniques and Video Editing*) (*Grades 9-12*) This one semester class looks at the four primary elements of filmmaking: writing, directing, cinematography, and editing. Through use of an array of new media, students will understand the scope of filmmaking as well as the individual components that make up the whole. Working both individually and in groups throughout the semester students will apply the concepts they learn in class through exercises and projects. (Semesters 1 and 2; ¼ credit)

6293 Digital Video (Narrative Short Story) (*Grades 10-12*) (*Prerequisite: Film Techniques and Video Editing, or instructor permission*) The focus of this class will be narrative filmmaking. Narrative filmmaking is the creation and telling of stories, either from a fictional basis, or with artistic license taken. Focused on writing, directing, cinematography and editing, students will work on individual and group assignments and projects. An on-going critical dialogue will be at the center of the production process.

(Semester 1; ¼ credit)

6294 Digital Video (Documentary) (*Grades 10-12*) (*Prerequisite: Film Techniques and Video Editing, or instructor permission*) The focus of this class will be documentary filmmaking. Documentary filmmaking focuses on the analysis of fact and actual events as the material the filmmaker uses to educate, inform and/or create opinion. Focused on writing, directing, cinematography and editing, students will work on individual and group assignments and projects. An on-going critical dialogue will be at the center of the production process. (Semester 2; ¼ credit)

6379 Creative Projects (Digital Arts) (*Grade 12*) This semester long course is for seniors who have an interest in creating their own works using digital media. Through a series of comprehensive creative projects, students will design and execute projects which respond to prompts and queries. This is a production based class, in which students will be responsible for all elements of their projects from inception to execution. Students will work both individually and in groups. All students should be proficient in one or more areas of digital art. (Semesters 1 and 2; ¼ credit)

## ***RELIGION AND ETHICS***

Religious study and practice is an ongoing experience at Friends Academy. The influence of Quakerism in the life of the school demands that teachers and students strive for an informed sense of community, harmony, equality, and simplicity in classroom settings, Meetings for Worship, the work program, and service to the wider community.

### **Required**

9th grade: Quakerism

10th grade: Community Service; Problems, Pragmatism and Citizenship

12th grade: Religion in American Culture: Seeking happiness, peace, pleasure, and purpose

9th- 12th grades: Quaker Meeting for Worship

### **Electives**

Reel Diversity: Examining Dimensions of Diversity through an Ethical Lens

Get on the Bus: The History of the Civil Rights Era in the United States – 1954 to 1968

### **Course Descriptions**

6120 Quakerism (Grade 9) Students study the faith, practice, and history of the Religious Society of Friends in this term course. Topics discussed include Meeting for Worship; the Inner Light; decision making by consensus; and testimonies regarding integrity, simplicity, equality, and peace (non-violence). A particular emphasis is placed on Quaker ideas in action and Quaker participation in social reform movements.

6130 Community Service: Problems, Pragmatism and Citizenship (Grade 10) A desire to serve and the pursuit of service learning is at the core of our school's educational mission. And yet, values without context are useless; beliefs without knowledge, powerless; virtuous intention without practical solution, worthless. The community service course has evolved to suit these needs; providing context for our values, intellectual foundation for our beliefs, and practical solutions for our virtuous intentions. The course culminates in the YSOP (Youth Services Opportunities Program) service trip where students will be confronted with the face of their study, thus homelessness (particularly in New York City) will be a centralizing theme.

6141 Religion in American Culture: Seeking happiness, peace, pleasure, and purpose (Grade 12)

This semester course will focus on an examination of contemporary individuals as well as religious groups that have made choices driven by the spirit. Students will be asked to examine these choices from a Quaker perspective as well as from a variety of religious traditions in America. Students will seek to define abstract ideals such as truth, equality, and peace and address the significance of service, education, and family in this life-long pursuit. Students will be challenged to look at the importance of religion, spiritual concerns, and values in their own lives as they too seek to achieve happiness, peace, pleasure and purpose. The major portion of a student's grade will be determined by the thoughtful completion of short reflection essays.

6142 Reel Diversity: Examining Dimensions of Diversity through an Ethical Lens (Grades 11 and 12)

This course will examine multiple dimensions of diversity in the United States. We will work to develop critical analysis skills, particularly in examining how societal differences (e.g. ability, race and ethnicity, gender, sexual orientation, class, etc.) operate as socially constructed systems of differentiation and power that shape society and the individual. Using film as text, we will explore diversity from an ethical perspective and how film can be used to promote intercultural understanding and growth, or marginalization and exclusion. The major portion of a student's grade will be determined by the thoughtful completion of short, critical analysis papers and a final group project/presentation. (*Fall ¼ credit*)

6143 Get on the Bus: The History of the Civil Rights Era in the United States – 1954 to 1968 (Grades 11 and 12) This course will study what may have been the most successful non-violent movement for social change in U.S. history: the civil rights movement, as it occurred between 1954 and 1968. This class will provide the opportunity for students to engage in critical reflection on the practice of social movements, the theoretical and historical understandings of the movement, and the

ongoing legacies of racial and economic inequality in the United States. Topics include the landmark *Plessy* and *Brown* legal decisions, the Montgomery bus boycotts, the signing of the Civil Rights and Voting Rights Acts, the student movement, sit-ins and more. These events had an enormous impact on American politics and culture, but what does it mean to look back at such historic events with the benefit of hindsight? Which events have become part of the “official narrative” of U.S. history...and which have not? The curriculum for this class will culminate with a Spring Break trip to Memphis, TN to visit the National Civil Rights Museum, located at the historic Lorraine Motel, which is the assassination site of Dr. Martin Luther King Jr. and a final assignment/project. (*Spring ¼ credit*)

Quaker Meeting for Worship (*Grades 9-12*)- All students and teachers in the Upper School are expected to attend the Meeting for Worship once each week. This, “the most important appointment of the week,” interrupts our busy lives and gives time for reflection.

## ***COLLEGE COUNSELING***

### **Required**

12th grade: College Readiness

### **Course Description**

College Readiness (*12th grade*)- This mandatory weekly course is designed to support seniors in the college application process. Topics covered include the common application, using Naviance, letters of recommendation, test score submission to colleges, how to write effective supplemental essays, keeping a college checklist and how to communicate effectively with admissions representatives. Completion of the course is contingent upon the successful completion of the common application including the required essay. (Fall)

## ***PHYSICAL EDUCATION AND INTERSCHOLASTIC ATHLETICS***

A physical education or interscholastic athletic credit is *required* for students in grades 9, 10, 11, and 12 each trimester in order to graduate. To receive credit, a student must attend and participate in a minimum of 80% of the classes every term.

Assessments and daily grading are based on a rubric that addresses 3 areas:

- Application of fitness concepts
- Application of movement concepts
- Application of personal & social responsibility

Students who fail to meet this requirement will not receive credit and will be required to complete their physical education requirement in the summer.

The philosophy of the program is to promote sound principles of physical, social, and psychological development through well-organized physical education and dance classes as well as interscholastic athletics. The curriculum stresses the importance of maintaining an active and healthy lifestyle through a variety of leisure time activities as well as an exposure to the more conventional team activities. Wellness concepts are included in the curriculum to help students develop habits and skills that contribute to overall physical and mental well being.

*\*Participation on a team sport or in the winter strength & conditioning or cardio-fitness programs after school, satisfies a student's physical education requirement for that season.*

### **Physical Education Curriculum**

9<sup>th</sup> – Personal Fitness

- Strength & Conditioning
- Cardio-fitness training
- Flexibility & strengthening

10<sup>th</sup> – Sport Education

11<sup>th</sup>/12<sup>th</sup> – Electives

- Sport Education
- Cardio-fitness
- Weight training
- Dance
- Yoga

### **Boys Team Sports** (JV = Junior Varsity, V = Varsity)

- JV and V Baseball
- JV and V Basketball
- V Crew
- V Cross Country
- JV and V Football
- V Golf
- V Ice Hockey
- JV and V Lacrosse
- JV and V Soccer
- Squash
- JV and V Tennis
- V Indoor and V Outdoor Track

### **Girls Team Sports** (JV = Junior Varsity, V = Varsity)

- JV and V Basketball
- V Cheerleading
- V Crew
- V Cross Country

JV and V Field Hockey  
V Golf  
JV and V Lacrosse  
JV and V Soccer  
Squash  
JV and V Softball  
JV and V Tennis  
V Indoor and Outdoor Track

6721 Dance I

6722 Dance II

Dance is a strong choice for students who enjoy movement and are interested in learning more. Students with a love of dance are welcome, whatever their background in technique. (Ballet Jazz, Tap, Lyrical, Hip Hop, Street, etc.) Students will come together to learn more about the body in motion and the creative process. These classes may be applied to either PE or Art requirements. (Full Year; 1/2 credit)

6720 Advanced Expressions in Dance I

6723 Advanced Expressions in Dance II

*(Prerequisite: Dance I and II or department approval)* Advanced Expressions in Dance may be taken for two years. The class is an intense study in technical and choreographic skills. Students develop a personal creative process, choreograph, and learn repertoire. This course may be applied to either PE or Art requirements. (Full Year; 1/2 credit)

## ***HEALTH***

6508 Health Concepts *(Required Grade 9)*

This semester course is designed to give factual information related to current health concerns. Topics such as alcohol/drugs, their use and abuse, reproduction, birth control, nutrition, and mental health are covered. The focus of class discussion is the psychology of young adulthood and dealing with healthy decision-making.

6509 Critical Health Issues *(Required Grade 11)*

This term course focuses on critical health issues confronting today's young adult. Through the use of the text, films, and class discussions, the goal is to develop positive decision-making skills. Guest lecturers from community agencies are invited to speak from time to time.

## ***OVERNIGHT EXPERIENCES***

Outdoor Education Trip This required ninth grade trip provides a social experience in an outdoor education environment. Students participate in backpacking, canoeing, climbing and overnight camping on a three-day trip with Friends Academy teachers. This trip also provides an opportunity for the many new entering students to meet new friends and begin to transition socially to their class.

The Youth Service Opportunities Project (YSOP) For this required tenth grade trip, students spend an afternoon and a full day in volunteer work helping people who are poor, hungry and homeless. Each Workcamp brings 25-50 students together to serve homeless and hungry people in various settings. By spending time away from home without the distraction of friends, TV or family, participants can focus their attention on service to others. Each Workcamp is guided by two YSOP Workcamp Leaders who are responsible for the content sessions and supervision of the Workcamps. Students are chaperoned by Friends Academy faculty members.

Washington, DC Trip This required eleventh grade trip provides the students an opportunity to connect what they are learning in their courses (American Literature and History) with a visit to the nation's capitol. The History and English departments developed a unique and exciting itinerary for the junior class. They have an opportunity to see a play, visit historic sites in D.C. as well as Mt. Vernon, and begin to do some on-site research for a required assignment. This trip also provides the opportunity for students to bond as a class.

Senior Retreat Seniors spend one overnight and a full day at Camp DeWolfe in Wading River, L.I. within the first week of school in September. The senior class advisors plan activities and discussions to help seniors focus on their upcoming year. The students spend time reflecting on goals for their senior year and begin planning senior fundraising events. The retreat site has a beach, pool and fields to allow for recreation time as well. This trip serves as a bonding experience for the class and advisors.

## ***OTHER PROGRAMS***

Driver Education Students age 16 and over may elect to take Driver Education at Friends Academy. The course is offered twice during the academic year, contingent on sufficient interest. Announcements are made concerning sign-up for Driver Education. Anyone wishing to take this course must have a NY State permit at the start of the program. Since enrollment is limited, students with earliest birth dates are given preference. There is a fee for this course. See Upper School Assistant to Principal for registration information and cost.

Independent Study for Grades 11 and 12 Students wishing to conduct an independent study must complete an Independent Study Application and submit it to the Principal at least one month before the start of the term in which the independent study will be conducted. The description of the project should be thorough and detailed, including a timeline, a list of work to be completed, and means of assessing the student's performance and learning. A faculty sponsor who has agreed to support the project must sign the application. The student will be asked to present his or her independent study proposal to the Upper School department heads committee, which will make a recommendation regarding approval to the Principal.

## ***TEXTBOOK ORDERING PROCEDURES***

You are responsible for ensuring that your child has the books he or she needs at the start of the year. By law, your school district is obligated to provide a limited supply of textbooks to students residing in the district, according to per-student budget allocations, even if they attend non-public schools; however, procedures vary widely among districts. Please read the following textbook ordering guidelines carefully. Booklists should be available in late March and will be accessible through the Parent Portal at [www.fa.org](http://www.fa.org). When purchasing books, please be sure to buy the editions listed on the school booklist using the ISBNs provided.

### **Procedure for Students who reside in:**

#### **A. NASSAU COUNTY with the exception of Hicksville, Farmingdale, Oceanside and Sewanhaka school districts:**

Families other than those in the above four districts will receive their textbooks through Friends Academy via a centralized supplier run by Nassau BOCES, called **Textbook Central**. With this system, we submit a single order to Textbook Central, receive the books during the summer, and then distribute them to their students. Consequently, if you reside in one of these districts, you do not need to do anything regarding your child's book order. We will submit an order based on your child's schedule and will provide an opportunity for your child to pick up his or her books before the beginning of the school year. When we learn of which books, if any, will not be provided by the districts represented by Textbook Central, we will notify you so you can purchase the books on your own. **Please be aware that you are responsible for ensuring that your child has any books not provided by Textbook Central at the start of the year.**

#### **Students residing in Hicksville, Farmingdale, Oceanside and Sewanhaka:**

These districts are following the procedures they have used in the past. You complete the book order form, have it signed by your division principal or designate, and bring the form to your district's textbook office. Districts typically ask that book orders be made by either May 1st or 15th. The district will order those books that meet its budgetary guidelines, and you will be able to pick the books up at the district office when they arrive. **If a district will not supply certain books, you will be responsible for purchasing them on your own.** We highly recommend that you call your district directly to confirm deadlines and specific procedures.

#### **IMPORTANT:**

Students and their families are responsible for the return of all borrowed textbooks and non-consumable books at the end of the school year. Students are not permitted to write or highlight in these books. Student accounts will be charged for any missing and damaged books borrowed from Textbook Central or Friends Academy. All textbook charges need to be settled before the opening of the new school year.

Students who change their schedules after the book order has been submitted to Textbook Central at the end of June will not be guaranteed books for their new courses.

#### **B. NEW YORK CITY**

Families residing in a borough of New York City may receive some of their textbooks through the New York City school system. Through this program, non-public schools submit a single order to the New York City textbook system, receive the books during the summer, and then distribute them to their students. Typically, families receive very few books through this system due to budgetary constraints and the process is quite cumbersome. We try to provide some books from our inventory for these students. **Please be aware that you are responsible for ensuring that your child has any books not provided by New York City at the start of the year.**

#### **C. SUFFOLK COUNTY**

**ALL** Suffolk County districts are following the procedures they have used in the past. Complete the appropriate book order form and submit the form to the Suffolk Co. BOCES textbook office. The central book office requests that book orders be submitted by May 15th. They will order those books that meet budgetary guidelines, and you will be able to pick the books up when they arrive at the central book office. If certain books will not be supplied (Suffolk County will not supply paperback novels, for instance), you will be responsible for purchasing them on your own.

**HOW TO OBTAIN TEXTBOOKS DIRECTLY FROM YOUR DISTRICT – Suffolk County and Hicksville, Oceanside and Sewanhaka:**

**NOTE:** The following instructions are for those families who will request textbooks directly from their school district offices. Please review the guidelines above for special instructions unique to certain districts. These instructions do not apply to families receiving textbooks through Textbook Central or the New York City school system (see above).

Textbooks provided by school districts are loaned and must be returned to the district at the end of the school year. Students are not allowed to write in or highlight these books. The district will bill you for defaced or lost books.

The procedure for borrowing books from your school district is as follows:

1. Review the textbook list found on the Parent Portal and identify the books required for your courses. Additional copies of the list are available in the Upper School Office, the school bookstore, and the Dean of Faculty's office.
2. Obtain "Textbook Order Forms" from divisional offices or the receptionist's desk in Frost Hall. The Principal, Assistant Principal, or divisional Administrative Assistant may be required to sign these forms to authorize your selections. Please check the specifics with your school district.
3. Fill out the forms completely using all of the information on your book list.
4. On or before your district's deadline, you must bring these forms to the Textbook Coordinator of your school district. We recommend that you contact your district to confirm specific procedures as deadlines may vary. The district will order the books and notify you when they arrive. If you order late and your books do not arrive by the start of school, you will be expected to purchase your books from the Friends Academy Campus Store. It is your responsibility to have your books when school begins.

The Friends Academy bookstore stocks some textbooks but books can also be purchased online.